



Digitized by the Internet Archive
in 2025

STOCK MARKET
THEORY AND PRACTICE

KEY TO FRONTISPIECE MAP

Albany Street	H-2	Maiden Lane	F-8	Rubber Exchange of New York	N-9	Tyrrel Bldg.	J-2
Battery Place	P-4	Marketfield Street	O-7	Ruwe E. C. Bldg.	M-2	Underwood Bldg.	30 Vesey St.
Beaver Street	F-4	Mill Lane	M-9	St. Christopher Chapel	C-2	Underwood Service Bldg.	63 Vesey St.
Bowling Green	A-5	Morris Street	H-7	St. Paul Bldg.	C-6	Underwriters Bldg.	133 William St.
Cedar Street	H-2	Nassau Street	M-6	St. Paul's P. E. Chapel	C-5	Union Indemnity Co.	100 Liberty St.
Church Street	D-3	New Street	M-6	St. Peter's R. C. Church	B-4	U. S. Assay Office	
Counties Alley	O-9	Pearl Street	F-8	St. Peter's R. E. School	H-3	U. S. Custom House	
Counties Slip	O-10	Pine Street	F-8	St. Peter's Rectory	A-4	U. S. Fidelity & Guaranty Co.	75 William St.
Cortland Street	F-10	Platt Street	F-10	Seligman Bldg.	M-9	U. S. Realty Bldg.	115 Broadway
Dey Street	D-2	Rector Street	L-2	Sheldon Bldg.	E-7	U. S. Sub Treasury (moved to Fed. Reserve Bldg.)	
Dutch Street	D-3	Riders Alley	D-10	Silversmiths Bldg.	E-6	Wadsworth Bldg.	
Edgar Street	M-4	Stone Street	F-7	Snellair Oil Bldg.	F-7	Wall St. Exchange Bldg.	
Exchange Alley	L-5	Temple Square	D-1	Speyer & Co.	H-7	Wall St. Journal, 40 New St.	
Exchange Place	L-6	Thames Street	G-1	Standard Oil Bldg.	N-6	Washington Bldg.	
Front Street	P-10	Trinity Place	H-4	Syndicate Bldg.	G-6	Washington Bldg.	
Gold Street	G-10	Trinity Street	E-2	Taylor Bldg.	F-3	Washington Bldg.	
Gold Street	G-10	Wall Street	K-3	Telephone & Telegraph Bldg.	195 Broadway	Washington Bldg.	
Greenwich Square	M-3	Washington Street	P-10	Thames Bldg.	D-5	Washington Bldg.	
Hanover Street	M-10	Water Street	M-2	Title Insurance Co.	G-5	Western Union Bldg.	191 Broadway
Hanover Street	K-10	West Street	M-2	Travelers Ins. Co.	E-8	Western Union Bldg.	40 Broad St.
John Street	F-8	William Street	J-9	Transportation Bldg.	A-5	Westinghouse Bldg.	
Liberty Place	F-6	South William Street	N-9	Trinity Bldg.	H-5	Whitehall Bldg.	
Liberty Street	G-1						

BUILDINGS

Adams Bldg.	61 Broadway	L-5	Hamilton Bldg.	129 Greenwich St.	H-3
Alberti Bldg.	.....	H-9	Harris Forbes Bldg.	.....	E-4
American Express Bldg.	65 Broadway	K-5	Havemeyer Bldg.	.....	E-4
American Surety Co.	100 Broadway	J-6	Hays Bldg.	.....	E-6
Anderson Bldg.	.....	D-7	Hegeman Bldg.	200 Broadway	D-6
Armory Bldg.	90 Nassau	J-6	Home Insurance Co. Bldg.	59 Maiden Lane	C-3
Astor Bldg.	10 Wall St.	H-3	Hook & Ladder Co. 10	.....	C-3
Astor House Bldg.	217 Broadway	K-3	Horn & Hardart Bldg.	68 Trinity Place	J-3
Bankers Loan & Investment Co.	67 William St.	H-3	Hudson & Manhattan R. R. Terminal	30 & 30 Church St.	D-3
Barrett Bldg.	60 West St.	K-1	Hudson Terminal Garage	.....	E-3
Beaver Bldg.	120 Liberty St.	L-10	Importers & Exporters	154 Washington St.	G-1
Beaver Bldg.	.....	L-10	International Telephone & Telegraph Bldg.	.....	N-8
Bennett Bldg.	76 William St.	G-9	Irving Trust Co. Bldg.	1 Wall St.	K-6
Blair & Co.	24 Broad St.	L-7	Jacquelin De Coppel Bldg.	.....	M-7
Bonbright & Co.	.....	H-6	Jewelers Bldg.	.....	L-6
Borling Green Bldg.	11 Broadway	O-5	Johnston Bldg.	30 Broad St.	L-6
Brady Bldg.	90 West St.	H-1	John St. M. E. Church	.....	E-8
Broad Exchange Bldg.	23 Broad St.	L-8	Kemble Bldg.	.....	P-7
Broadway & Maiden Lane	170 Broadway	F-6	Ker S. S. Bldg	.....	M-8
Chamber of Commerce	59 Liberty St.	F-6	Kull Loeb & Co.	.....	J-9
Central Bldg.	143 Liberty St.	F-1	Lawyers Title & Trust Co.	160 Broadway	F-6
Central Fire Bldg.	.....	F-9	Lee Higginson & Co. Bldg.	37 Broad St.	L-7
Chubb & Son	5 S. William St.	M-9	Liberty Bldg.	.....	F-2
Chubb & Son Annex	.....	N-10	Liverpool, London & Globe Insurance Co.	.....	G-9
Coffee Exchange	.....	L-10	Lords Court Bldg.	.....	L-8
Cockcroft Bldg.	.....	D-7	Lorillard Bldg.	.....	L-7
Cornwall Bldg.	.....	E-3	Manhattan Co. Bldg. (The)	40 Wall St.	J-8
Crystal Bldg.	80 Washington St.	O-5	Marine & Commerce Bldg.	.....	N-6
Day (J. P.) Exchange	14 Maiden Lane	F-6	Maryland Casualty Co.	.....	E-9
Diamond Exchange	.....	D-8	Massachusetts Bonding & Ins. Co. Bldg.	.....	D-9
Downtown Athletic Club	.....	O-3	M. O. H. Bldg.	136 Liberty St.	G-2
Downtown Community House	.....	K-2	Montauk Bldg.	.....	K-10
Empire Bldg.	71 Broadway	K-5	Munson S. S. Bldg.	67 Wall St.	K-10
Engineering Bldg.	114 Liberty St.	G-3	Mutual Life Buildings	.....	G-7
Evening Post Bldg.	75 West St.	K-1	National Board of Fire Underwriters	.....	E-10
Excelsior Power Co. Bldg.	.....	D-10	National City Co. (The)	55 Wall St.	K-9
Exchange Court	52 Broadway	L-6	National Surety Co.	.....	J-2
Equitable Bldg.	120 Broadway	H-6	New Amsterdam Casualty Co.	.....	E-8
Faours Bldg.	81 Washington St.	L-3	New York Cotton Exchange	.....	M-10
Federal Reserve Bank of N. Y.	.....	F-3	New York City	.....	E-10
Federal Reserve Bank Bldg.	95 Maiden Lane	G-10	New York City	.....	E-10
Fidelity Casualty Co.	.....	G-4	New York City	.....	E-10
Fire Companies Bldg.	8 Liberty Street	H-10	New York City	.....	E-10
Fire Engine No. 6	.....	F-8	New York City	.....	E-10
Frankel Bldg.	40 John St.	F-8	New York City	.....	E-10
Frances Tavern	74 Pine St.	P-9	New York City	.....	E-10
Fred F. French Bldg.	99 Broadway	M-5	New York City	.....	E-10
Fulton Bldg.	87 Nassau St.	D-7	New York City	.....	E-10
Fulton Chambers	.....	F-9	New York City	.....	E-10
Gauvin Bldg.	.....	E-4	New York City	.....	E-10
Gillespie Bldg.	7 Dey St.	D-6	New York City	.....	E-10
Girdard Bldg.	.....	C-1	New York City	.....	E-10
Glacken Bldg.	227 Fulton St.	H-8	New York City	.....	E-10
Goldman Sachs & Co.	30 Pine St.	H-8	New York City	.....	E-10
Great American Insurance Co.	.....	G-9	New York City	.....	E-10
Haligton & Co.	41 Pine St.	J-3	New York City	.....	E-10

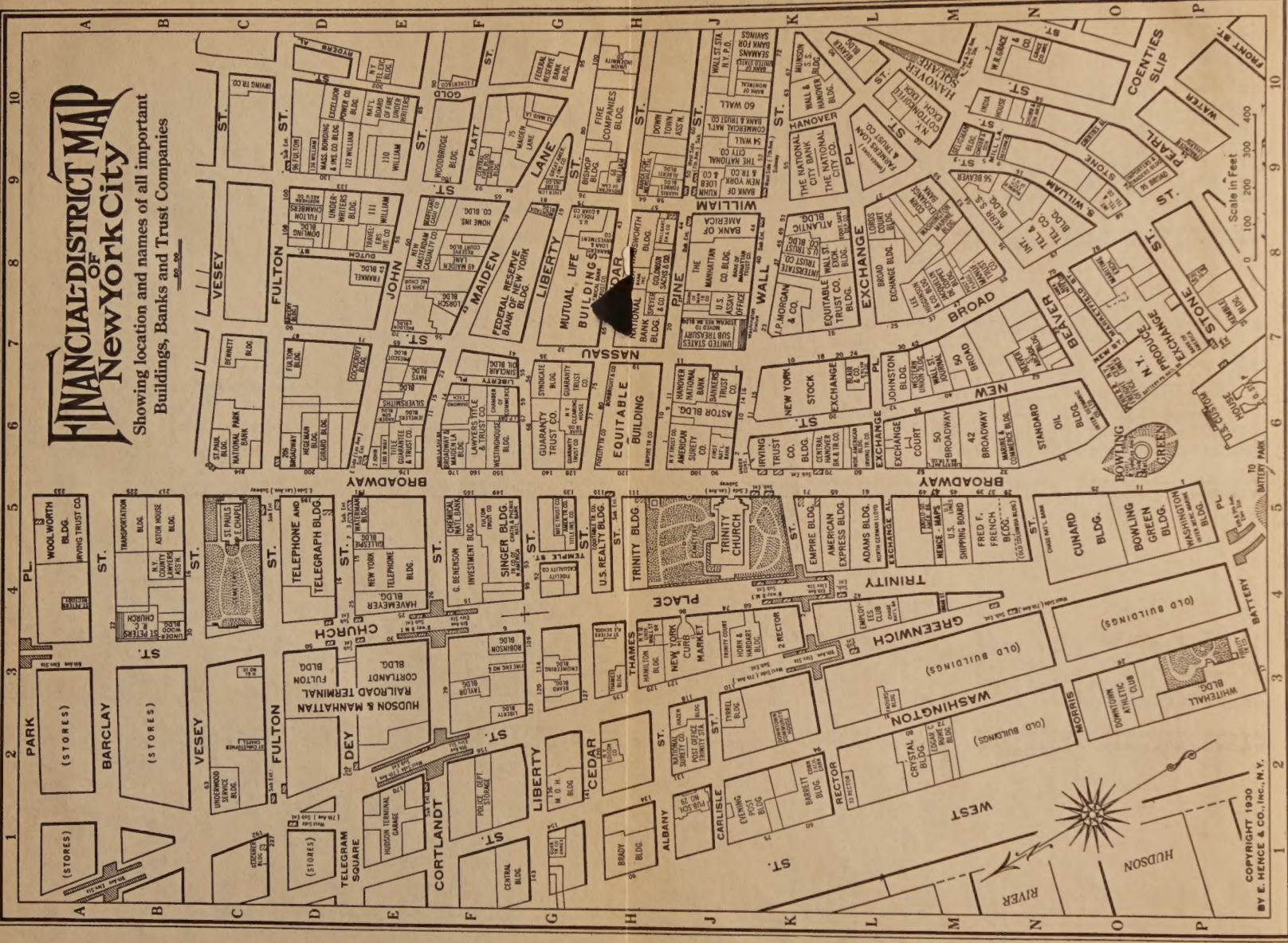
BANKS AND TRUST COMPANIES

American Foreign Banking Corp.	68 William St.	H-9	Grace National Bank	7 Hanover Square	N-10
American Trust Co.	135 Broadway	G-5	Guaranty Trust Co. of N. Y.	140 Broadway	G-6
Anglo-South American Bank	49 Broadway	M-5	Hibernia National Bank & Trust Co.	.....	F-7
Banco Commerciale Italiano	64 William Street	H-9	Hibernia Trust Co.	57 William Street	H-9
Bancum Corp.	62 Wall Street	H-9	International Acceptance Bank, Inc.	52 Cedar Street	H-3
Bankers Trust Co.	10 Wall Street	J-6	International Acceptance Trust Co.	52 Cedar Street	H-3
Bank of America National Association	44 Wall Street	J-8	International Germanic Trust Co.	26 Broadway	O-6
Bank of China	165 Broadway	F-5	International National Bank & Trust Co.	40 Broadway	M-6
Bank of London & South America	67 Wall Street	K-10	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bank of Manhattan Trust Co.	27 Pine Street	J-3	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bank of Manhattan Trust Co.	40 Wall Street	K-3	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bank of New York & Trust Co.	43 Wall Street	K-9	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bank of Nova Scotia	49 Wall Street	K-8	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bank of Taiwan	165 Broadway	F-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bacley Bank Ltd.	.....	F-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Battery Park National Bank	8 Broadway	O-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Bellamy Bank	67 Wall Street	K-10	Liberty National Bank & Trust Co.	40 Broadway	M-6
Belmont Trust Co.	29 Broad Street	L-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Canadian Bank of Commerce	130 William Street	D-9	Liberty National Bank & Trust Co.	40 Broadway	M-6
Central Hanover Bank & Trust Co.	70 Broadway	K-6	Liberty National Bank & Trust Co.	40 Broadway	M-6
Central Hanover Bank & Trust Co.	135 William St.	D-9	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chase National Bank	18 Pine Street	H-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chase National Bank	25 Broadway	N-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chase National Bank	75 Maiden Lane	G-9	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chatham Phenix National Bank & Trust Co.	149 Broadway	F-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chemical Bank & Trust Co.	165 Broadway	F-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Chemical Bank & Trust Co.	58 Cedar Street	H-8	Liberty National Bank & Trust Co.	40 Broadway	M-6
Commercial National Bank & Trust Co.	59 Wall St.	J-10	Liberty National Bank & Trust Co.	40 Broadway	M-6
Corn Exchange Bank	13 William Street	M-9	Liberty National Bank & Trust Co.	40 Broadway	M-6
Corn Exchange Bank	Washington Street	K-2	Liberty National Bank & Trust Co.	40 Broadway	M-6
Dominion Bank	49 Wall Street	K-8	Liberty National Bank & Trust Co.	40 Broadway	M-6
Eastern Exchange Bank	37 Broadway	M-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Empire Trust Co.	120 Broadway	H-6	Liberty National Bank & Trust Co.	40 Broadway	M-6
Equitable Life Assurance Co. of N. Y.	11 Broad Street	K-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Equitable Trust Co. of Baltimore	31 Nassau Street	G-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Equitable Trust Co. of New York	11 Broad Street	K-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Federal Land Banks Fiscal Agency	31 Nassau Street	G-7	Liberty National Bank & Trust Co.	40 Broadway	M-6
Fidelity Trust Co. of N. Y.	17 Battery Place	P-3	Liberty National Bank & Trust Co.	40 Broadway	M-6
Fidelity Trust Co. of N. Y.	120 Broadway	H-6	Liberty National Bank & Trust Co.	40 Broadway	M-6
First National Bank of N. Y.	2 Wall Street	J-6	Liberty National Bank & Trust Co.	40 Broadway	M-6
French American Banking Corp.	65 Broadway	L-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Fulton Trust Co. of N. Y.	140 Broadway	F-5	Liberty National Bank & Trust Co.	40 Broadway	M-6
Fulmott Bull Broker Bank Ltd.	120 Broadway	H-6	Liberty National Bank & Trust Co.	40 Broadway	M-6

FINANCIAL-DISTRICT MAP OF New York City

Showing location and names of all important
Buildings, Banks and Trust Companies

Scale in Feet



STOCK MARKET THEORY AND PRACTICE

By

R. W. SCHABACKER, M.A.

Financial Editor of Forbes Magazine



B. C. FORBES PUBLISHING COMPANY

120 FIFTH AVENUE

NEW YORK CITY

COPYRIGHT 1930 BY
B. C. FORBES PUBLISHING COMPANY

First Printing, May, 1930
Second Printing, June, 1930

*Printed in the United States of America
by the Plimpton Press, Norwood, Mass.*

To
MY MOTHER AND FATHER

PREFACE

The mental germination of Stock Market Theory and Practice occurred toward the close of 1928. By that time it had become definitely apparent that "the public" was completely imbued with the desire to mingle in the stock market. And it had become just as apparent that the same public did not know where to begin or how to go about its market activity. It was floundering about, taking tips from the butcher, baker and candlestick-maker, was grasping at every wisp of rumor, seeking to build for itself an adequate foundation for intelligent market operation, yet had neither time nor inclination to be ruled by anything but the speed with which easy profits might seemingly be garnered.

For many years the author, in his capacity as a market analyst, has had the dubious privilege of reviewing a constant procession of individual investors and market traders, each with his own theories, his own experiences, his own story of confident success or pitiful failure.

And in those years of reviewing and advising, especially the latter ones preceding the debacle of 1929, the conclusion was forcefully driven home by repeated observation, that personal failure in stock market operation is, in the vast majority of cases, due to plain ignorance of market affairs.

"Easy profits in Wall Street" has become a lively topic of general discussion and intense popular interest. And that catchphrase, far from being a truism, lies at the bottom of perhaps 75 per cent. of the "failures" in personal market effort which have ever come to the author's attention. Why anyone should truly believe that he can turn from hard work and serious effort in mastering his own chosen line of endeavor, and reap ten times the profit, with only one-tenth the effort, in the stock market, is one of those questions whose answer demonstrates how cupidity may impair human reason.

The Stock Market Panic of 1929, with its resultant devastation for the "New Era" credo and the fallacy of quick profits without labor or study, brought to the public consciousness the author's previous conclusions better than any amount of preaching could ever do. There is no royal road to riches in stock market trading. The man in the street cannot shut his eyes, pick a stock, and take a profit very many times in succession.

Such things were just as true when this volume was first conceived as they are now. They are fundamental facts which are operative whether the public recognizes them or not. And it was this patent need of the public, with its growing desire for market participation, its hunger and extreme need for market knowledge, that led to the commencement of Stock Market Theory and Practice.

Originally, it was planned to write two volumes, one dealing with the actual machinery and physical tools of the stock market, the other dealing more with the theories of using those tools and that machinery to achieve the basis for success in stock market operation. Before the first volume was well under way, however, public participation in the market on this reckless, haphazard basis, had increased tremendously, and so had the demand for a complete text-book on the market. It was thus decided to combine both volumes in one, and to build a single, complete encyclopedia of stock market theory and practice which would cover, if possible, the entire field, and be equally understandable, and therefore equally useful, to the casual layman, the "man in the street" and the experienced trader, according merely to the time and study which each might care to devote to the subject matter.

So much has been written about the stock market, especially in recent years, that there would be no valid excuse for an additional volume on the subject unless it were conceived from some new ideas and new ideals. In this volume it has been the author's constant aim to present a book which will offer full and complete information on every matter connected with the stock market and with stock market operation, to express the matter as clearly and fully as possible, to pass over no individual point or subject

because it might be unpopular, technical or difficult of explanation, but yet to describe all things in a manner so clear, and in a sequence so simple and orderly, that the entirely uninitiated reader might begin completely ignorant, and emerge completely versed, in all matters affecting the stock market and its trading operations.

With this end in view, the book has grown to proportions which may at first appear formidable to the casual reader or the occasional market trader. Let it be remembered, however, that he alone is the judge of how much time and energy, industry and study, he will give to the subject of stock market theory and practice. The conscientious student should wish to study carefully, for instance, those chapters relating in detail to the Stock Clearing Corporation, the delivery of securities, the negotiation of brokers' loans, etc. But the practical stock trader may merely skim over such detailed chapters toward those in the second half which pay chief attention to fundamental and practical theories calculated to bring greater success in actual market operation.

The volume has been divided into two parts, the first dealing with mechanics or tools, the second with practical trading theories, or the most successful methods for using those tools. The reader may hope, therefore, to find in the volume whatever he cares to take time for. It has been designed to be either a pleasant pastime for the dilettante, a helpful guide for the casual market operator, a text-book for the busy trader, or a complete compendium of information for the careful student.

And, from the standpoint of the author, it will have accomplished its basic purpose if it helps to dispel the veil of ignorance and unintelligence which has, for so many market operators, surrounded the stock market and activities in that market; if it assists them to a better understanding of fundamentals, a more systematic and organized attitude toward a serious business; and if it gives them a clearer conception of what they are dealing in, where their objectives truly lie, and how they may attain those objectives with mental satisfaction and financial success.

Despite the high ambitions of the author, Stock Market

Theory and Practice is presented in an attitude of humility — an attitude which is born of long experience in the shortcomings and the fallibility of any and all stock market knowledge and theory. Even in point of fact and figure the author does not presume to claim infallibility, although every effort has been made to verify all statements and information for their completeness and accuracy.

There is one question which, sooner or later, is asked, either orally or mentally, by the more astute beginner in stock market theory. The question springs from a skeptical curiosity as to why any writer or stock market adviser is not so successful in his own market activities that he need not even think of selling his analysis and advice to others. It is a fair question, and the author has heard it asked often, but never publicly answered.

In his mind there are a number of answers, a minor one being that no truly conscientious stock market adviser can have any material financial interest in the market, on one side or the other, and still remain in that unbiased and open state of mind which is the only condition under which he can give conscientious service to his clients. A corollary to this is the tendency for such a conscientious analyst to become skeptical and ultra-conservative in his own operations, seeing all about him the mistakes and reverses that often follow even the best of reasoning.

Of paramount importance, however, for our own consideration, is the ultimate fact that no adviser, no theory, no amount of experience, can approach infallibility. The reader who opens this, or any other, volume on stock market trading theories with the preconceived notion that it is the ultimate "Open Sesame" to perfect and steady stock market profit, will do well either to replace the book or to modify his opinion to one of greater humility, both for himself and for the author, that he may realize the limitation of even the best of trading theories.

All that may be written about the stock market must ever serve merely as "the beginnings of knowledge" for the market operator, be he the ignorant neophyte or the experienced trader. All the rules that may ever be evolved for successful stock market operation have their exceptions, and must be used more as a

background for further study and future experience, and with a generous use of good common sense, than as a royal road to easy stock market profits.

But the fact does remain that if the potential operator will remember the lessons he has learned in recent years, will rid himself completely of the "easy profit" doctrine, and apply himself, studiously and conscientiously, with new and true humility, to the contents of this volume and to other sources, he may achieve plenty of profit and plenty of satisfaction from his market operation. His rewards for such rebuilding of original plans, hopes and dreams, may not accrue so rapidly as he may once have imagined — they may not be so tremendous in volume — but at least they will be built upon a logical and permanent foundation, and not upon the sands of chance and temporary good fortune.

As among those rendering outstanding assistance in the book's construction thankful acknowledgment is accorded to Mr. J. Edward Meeker, Economist of the New York Stock Exchange; to Mr. Samuel F. Streit, President of the Stock Clearing Corporation; and to the many other associates of the New York Stock Exchange who have rendered invaluable labor and aid. Thanks are also accorded to Messrs. James E. Butts, of Sutro Bros. & Company, and Arnold W. Wetsel, of the Wetsel Market Bureau, for reading and criticizing portions of the manuscript. Full personal acknowledgment to all who have aided in the work would add many more pages to an already full volume, but the author takes this opportunity of expressing appreciation for the assistance and co-operation of the "Outside" stock exchanges, many New York brokerage houses, corporations, and the host of individuals whose interest, courtesy and energy have made this volume possible.

R. W. SCHABACKER.

New York City,
March 6, 1930.

Contents

PART I

	PAGE
Chapter I. — Introduction	1
Knowledge of Working Materials is Essential — Examples of Public Ignorance — Three Main Types of Corporate Security — Bonds vs. Preferred Stock — The Common Stock — What Stock Ownership Means — Ownership Principle is Fundamental — Essence of Buying Stock is Ancient — Buying Into the Larger Business Organizations — Largest Corporations Owned by the Public — Increased Stock Market Interest is Logical.	
Chapter II. — The Stock Exchange	10
Economic Value of the Stock Exchange — The Ancient Method — Modern Development — “ Limited Liability ” Aids Stock Popularity — The Broker and the Theater Ticket Agent — Economic Value of the Stock Broker — The Market Operator — Raising of Capital Expedited — Economic Value of the Market Operator — Three Classes of Market Operator — Speculation vs. Investment — The Element of Risk — The Element of Time — The Element of Personal Attitude — The Gambler — Gambling on Tips — Just Plain Gambling — Fundamental Characteristic of Gambling — Rise of the Stock Exchange — The First New York “ Exchange ” — Development with the Nation’s Growth — The Ready Market — The Continuous Market — Market Development Has Not Changed Fundamentals — Modern Markets Merely Simplify — The New York Stock Exchange as a Model — Trading Posts — The “ Floor ” — Visiting the Exchange — Stock Exchange Members — Stock Exchange “ Seats ” — Types of Broker — The Commission Broker — Private Life of the Broker.	
Chapter III. — Brokerage Houses and Trading Facilities	38
The Rise of the Brokerage House — Branch Brokerage Offices — Quick Communication Fosters Trading — Types of Brokerage House — All Strictly Supervised — Appearance of the Brokerage Office — The Customers’ Man — Opening a Broker-	

age Account — Depositing Brokerage House Credit — The Price Factor in Trading — Selecting the Stock — Stock Symbols — Getting Acquainted with Symbols — Nicknames of Active Stocks — Reporting Sales — The Stock Tape — Transmitting the Order — Order Pads — Ways of Giving an Order — The Limited Order — The Market Order — Good Till Cancelled Order — Time Limits on Orders.

Chapter IV. — Following a Typical Transaction 59

What Follows an Order — A Concrete Example — The Order Received — Signalling the Broker — The Broker does his Stuff — The True Market — Supply and Demand — The Broker Surveys his Market — The Broker Bids — Completing the Trade — The Broker Reports — Speed of Transaction — The Seller — The Selling Order — The Broker and "Good Executions" — Reporting to the World — Ticker Operators The Ticker System — Ticker Delays — The New High Speed Ticker — Back to the Example — Misunderstandings of Tape Watchers — The Broker is Usually Right.

Chapter V. — Development of the Stock Clearing Corporation 79

Delivery of Stock Traded — Negotiability of the Stock Certificate — Transfer of Stock Ownership — Old Methods of Delivery Slow — Fundamentals of the Clearing Principle — A Specific Example — Savings in Credit — Economic Service of the Clearing Principle — Periods of Settlement — Term vs. Daily Settlement — Settlement Rules for Regular Trades — Special Settlement Trades — Old Process of Comparison — History of the Stock Clearing Principle — Clearing Stocks — Clearing Money — The New York Stock Clearing Corporation.

Chapter VI. — The Night Clearing Branch 93

Saving Time by Large Volume — Regular or Cleared Stocks — The Central Distributing Branch — Effecting a Comparison in a Cleared Issue — Exchange Tickets and Comparisons — The Night Clearing Sheet — Balances to Receive and Deliver — The Price Element — The Delivery Price — How It Works — Cash Extensions on Balances — Importance of the Delivery Price — Adjustments Balance to "Prove" — Back to the Orig-

inal Example — Stock Loans on the Night Clearing Sheet —
The Night Clearing Branch in Action — The Allotment Sheet
— “ Giving a Name.”

Chapter VII. — The Day Clearing Branch 113

The Night Clearing Branch as a Background — Savings by
Clearing Money Payments — Day Branch has Wider Scope
— The Raw Materials — Physical Make-up — Control Rec-
ords — Controlling Credits and Debits — Closing the Day —
The Final Receipt — Physical Delivery of Stock Between
Brokers — The Central Delivery — Central Delivery Ticket
— Stock Delivery to Clearing House — Establishing Credit for
Delivery — Future Potential Developments of the Clearing
System — Automatic Accounting Machines — Central Deposit
Bureau for Securities — Stock Receipt from Clearing House
— Establishing Debit for Receipt of Stock — Delivery of Ex-
Clearing Stocks — Exchange Tickets for Ex-Stocks — Contin-
gent Lists for Ex-Issues — Direct Delivery — Non-Member
Banks — Stock Transfer Department — Clearance of Loans —
Savings of Loan Clearance — Withdrawal of Collateral — Sav-
ings by the Stock Clearing Corporation.

Chapter VIII. — Stock Exchange Credit and Marginal Trading 143

Use of Credit in Stock Market Operation — Credit and Specu-
lation — Credit and the Ownership Theory — Property Mort-
gages and Marginal Trading — Dangers of Marginal Trading
— Economic Justification of Marginal Trading — Marginal
Trading Like Any Loan — Broker's Services Important —
Convenience of Marginal Trading — Example of a Margin
Account — The Broker Takes no Risk — How to Calculate
Margin — Average Margins Demanded — “ Selling Out ” the
Customer for Insufficient Margin — The Stock Panic of 1929
— Market Value Affecting Margin — Paper Profits Raise
Margin — Pyramiding on Margin — Completing the Margin
Transaction — Interest on Debit Balances — Greater Profits
Possible Through Margin Trading — Margin Trading
Increases the Risk.

Chapter IX. — The Short Sale 162

“ A Trick of the Trade ” — Reversing the Order of Trades —
The Two Parts of Every Transaction — Double Nature of the

Long-Pull Purchase — Making Money in a Declining Market — Selling High and Buying Low — Use of Credit in Short Selling — Use of Credit Always Necessary — "Cash as a Commodity" Theory — Masked Short Selling in Other Fields — Dangers of Short Selling — A Specific Example of the Short Sale — Selling First — Borrowing the Stock — Shopping for Stock — The Loan Crowd — Security for Borrowed Stock — Dividends on Short Stocks — Loans to Lenders of Stock — Loaning Flat — Loaning at a Premium — Calling a Loan of Stock — Back to the Example — Margin Requirements on the Short Sale — Calculating Margin on the Short Sale — Buying In the Short Customer on Insufficient Margin — A Successful Short Campaign — Pyramiding on the Short Side — Profits in a Bear Market — Credit Charges — It Happens in Story Books.

Chapter X. — Odd-Lot Dealing 187

The Usual Unit of Trading — An Arbitrary Figure — Odd-Lot Dealer must be a Specialist — The Specialist — Growth of the Odd-Lot Business — Growth of Odd-Lot Houses — Economic Value of the Odd-Lot Dealer — Odd-Lot Dealer's Market Position — Balancing the Position — The Price Factor — Automatic Fixing of Odd-Lot Prices — Profits of the Odd-Lot Dealer — Execution "Away from the Market" — An Odd-Lot Example — A Growing Position — Offsetting Orders — Risks of the Odd-Lot Dealer — Quarter Stocks — Determining Odd-Lot Prices on Inactive Stocks — Danger of Poor Execution — Orders at Opening or Closing — The Split Opening — Limited Odd-Lot Orders — Importance of Opening Prices — An Involved Point of Practice — Protection for the Odd-Lot Dealer — Profiting by Knowledge of the Law — Time Limits on Odd-Lot Orders — Efficiency of Odd-Lot Houses — Volume of Odd-Lot Trading — Minimum Orders Accepted by Brokers — The 10-Share Unit Market.

Chapter XI. — Brokers' Loans 214

Result Chiefly of Marginal Trading — Broker Makes Loan for Customer — Undigested Securities — Time Loans — Demand Loans — Collateral Loans — Commercial Loans — Collateral Loans not Rediscountable — Bankers Prefer Commercial Loans — The Broker's "Margin" — Direct Negotiation

for Time Loans — Foreclosing a Time Loan — The Call Loan — Daily Settlements Need Daily Loans — General Loan Agreement — The Loan Envelope — Mixed Collateral — Negotiating the Call Loan — Originating the Supply — Originating the Demand — Offices of the Day Clearing Branch — A Specific Example — The New Loan Agreement — Paying Off — Transference of Loans — Withdrawing Collateral — Price of Demand Credit — Development of Method — Giving Notice — Supervision by the Money Committee — Meeting a Crisis — The Banking Influence.

Chapter XII. — Dealing with the Broker 245

Know Your Broker — Dispelling the Mystery — Limits of Sociability — Blaming the Broker — Personal Advice from the Broker — Trading from a Distance — Personal Touch not Necessary for Success — Written Forms — Getting Quotes — The Central Quotation System — Cancelling Orders — Trading by Mail — Trading from Another Broker's Office — The "Give-Up" Order — Report Forms — Dividend Practice — Limited Orders Reduced on Ex-Dividend Dates — Simple Confirmations — The Bill as a Confirmation — Make-up of a Brokerage Statement — A Specific Example — Proving the Balance — Individual Transactions — Paying Dividends on Short Stock — Commissions "Both Ways" — A Price, "Flat" — Credits Exceed Debits — The Interest Account — The Individual Items — Interest on Short Sales — No Interest on Small Items — Balancing the Interest Entries — Interest Rates Vary — Short Position Balances — Giving a Price to the Short Position — The Opening Balance — Checking the Broker's Statement — Return Receipts — Commission Charges — State and Federal Taxes — The Discretionary Trade — Customer Accepts Total Risk.

Chapter XIII. — Outside Stock Exchanges 288

New York Stock Exchange as a Model — Development of Outside Markets — Mediums for Smaller Issues — Economic Value of Outside Markets — How to List Stocks on Stock Exchanges — Some of the Outside Exchanges — The Chicago Stock Exchange — The San Francisco Stock Exchange — The Philadelphia Stock Exchange — The New York Curb Exchange — Rapid Growth — Associated Stock Exchanges — As-

surances of Reputable Listing — Playing Safe — Strict Regulations of Reputable Exchanges — An Aid in Judging Reliability of the Broker — A List of Listed Brokerage Houses — Conclusion of the First Part.

PART II

Chapter XIV. — Types of Corporate Security 303

From Practice to Theory — Ways of Raising Corporate Capital — The Corporation Bond — Types of Bond — Refunding Issues — Profit-Sharing Bonds — Installment Repayment of Bonds — The Sinking Fund — Maturity of the Bond — Negotiability of the Bond — Coupons as Interest — Adjusting Bond Interest at Purchase — The Corporation Note — Bonds vs. Stocks — Preferred Stock — Par Values — No-Par Values — Cumulative Dividends on Preferred Stock — Non-Cumulative Dividends — Participating Preferred Stock — Preferred vs. Common Stock — Class A Common vs. Preferred Stock — Management Options on Stock — Convertible Bonds — An Example: Missouri Pacific Convertibles — American Tel. & Tel. Convertibles — Conversion at a Scale Price — Conversion into Stock — Warrant Bonds — Convertible Preferred Stocks — Preferred Stock with Warrants — Loew's Preferred with Warrants — Notice of Redemption — The Common Stock — The Stock Certificate — The Transfer Form — Endorsing in Blank — Taking Up Rights to Additional Stock — "Good Delivery" — Temporary Stock Certificates — The Trust Certificate — For Voting Control — An Example in Ford of Canada — Stock in Escrow — Voting Privileges — Importance of Voting Privileges — The Voting Proxy — Struggle for Control — Registered Voters.

Chapter XV. — Dividends and Rights 346

Dividends and Interest — Books of Record — Common Fallacy of Dividends — Dividends not a Fundamental Benefit — A Specific Example — "Ex-Dividend" — Importance of Date — Closing the Dividend Books — Market Price Drops on Ex-Dividend Date — The True Significance of "Ex-Dividend" — Types of Dividend — The Regular Dividend Rate — Extra Dividends — Ex-Dividend on Stock Dividends — What Good are Stock Dividends? — Advantages of the Stock Split-up — Dividends in Stock — Dividends in Scrip — Advantage to the

Corporation — Disadvantage of Dividends in Stock — A Specific Example — Dividend Dependent on Market Fluctuations — Granting of Rights — Calculating the Value of Rights — The Approximate Method — The Second Method — The Formula Method — “Ex-Rights” — Sell or Exercise All Rights — Logical Time to Sell Rights — Exchanges May Set Ex-Dividend Date Rulings.

Chapter XVI. — An Introduction to Stock Analysis . . . 372

Back to Fundamentals — What Makes a Stock Attractive? — The Company's Business — Seasonal Influence — The “Depression-Proof” Stock — New Invention Industries — Management — Following the Business Leaders — The Corporation Balance Sheet — Proportions of Security Capitalization — New York, Chicago & St. Louis Railway — Giving the Public What It Wants — Size of Stock Issue — A Case in Point: Auto-Lite vs. Jersey Standard — Understanding the Balance Sheet — Make-up of a Balance Sheet — Good-Will and “Intangible Assets” — The Liability Side — Calculating the Working Capital — Gauging the Liquid Position — Profit and Loss Surplus — Book Value — How to Calculate a Stock's Book Value — Book Value is a Nominal Figure — Hidden Assets — Earnings as a Fundamental Factor — Earnings vs. Balance Sheet Items — An Example: Du Pont — Importance of Publicity in Corporation Statements — Make-up of the Earning Statement — Net Income — American Locomotive Company — Importance of Interim Earning Reports — Depreciation and Depletion Charges — Rate of Depreciation — Rate of Depletion — Depletion Charges in Mining Companies — Liquidating Companies — Reserves for Taxes.

Chapter XVII. — Price and Yield in Stock Analysis . . . 402

Fundamental Factors in Stock Analysis — Price is of Prime Importance — Price Factor Depends on Personal Analysis — Relation of Price and Fundamentals — Book Value and Market Price — Earnings and Market Price — The Price-Earnings Ratio — The Basic Criterion of Values — “The New Era?” — “Ten Times Earnings” — Logical Basis for the Fundamental Ratio — The Conservative Basis — How It Works Out — Why 1929 Prices Showed Inflation — The Dividend Yield — Proper Attitude Toward Dividends — How to Compute

Stock Yields — Calculation by Yield Tables — Price-Earnings Ratio Indexes — The Fallacy of Inflation — Dangers of a High Yield — Discounting Insecure Dividends — Importance of a Proper Market — Gauging a Stock's Future Prospects — The Element of Imagination in Prospects — Stocks Based on New Inventions — Normal Course for Stocks of New Inventions.

Chapter XVIII. — Sources of Stock Information . . . 427

Importance of Information in Stock Analysis — Three Chief Sources of Information — Statistical Information — The News Ticker — The Newspapers — Selecting the Newspaper — The Statistical Bureau — Financial Periodicals — The Market Advisory Service — Mushroom Growth of Tipping Services — Testing the Market Service — A List of High Grade Services — Cranks and Market Bureau Responsibility — The Brokerage House Market Letter — Boosting Pet Stocks — The Tipster Sheet — Importance of the Stock Information Bureau — Inquiry Departments of Periodicals — The Better Business Bureaus — Reading the Financial Page — Open, High, Low and Last — Ex-Dividend and Net Change — Reading the Bond Page — Deferred Delivery in the Bond Market — A Portion of the Bond Page with Hieroglyphics.

Chapter XIX. — What Makes the Market Move . . . 454

The Tidal Movements of the Market — The Market and Individual Stock Movements — Chief Market Indexes — Consonance of Individual Movements — Supply and Demand as a Basic Market Factor — Two General Types of Market Factor — The Aim of Stock Analysis — Business as a Factor in General Market Movements — Which Reverses First: Business or the Market? — Forecasting Reversal of the Business Index — Fundamentals Affecting Future Business Trends — Reverse Swings in the Business Index — Technical Factors Influencing Market Movements — Credit as a Technical Factor — Brokers' Loans in Market Forecasting — Brokers' Loan Compilations — "Bootleg Loans" — Relation of Brokers' Loans to Speculation — The Brokers' Loan Ratio Index — Effects of Rediscount Rates on the Market — Rediscount Rates as an Index of Credit — The Element of Public Savings — Public Psychology and General Market Movements — Stimulating Public Psychology — Public Psychology and Market Excesses.

Chapter XX. — An Introduction to Trading 482

Reviewing the Fundamentals — Cancelling Limited Orders — The Stop-Loss Order — How It Works — Stop-Loss Orders as a Market Factor — Uses of the Stop-Loss Order — Stop-Loss Orders in Odd-Lot Trading — Execution of Stop-Loss Orders in Odd- and Full-Lot Trading — Wide Openings after Overnight News — Specialist May “Bunch” Orders — A Market Convenience — Complaints on Wide Openings not Justified — The Stop and Limit Order — The Coupled Order — Short Selling — Stop-Loss Orders to Protect a Short Position — The Stock Corner — The Stock Campaign — Pyramiding on Paper Profits — “Averaging Down” — Pyramiding a Short Position and “Averaging Up” — Averaging Operations are Illogical — Dangers of Averaging — Option Trading — The Put — The Call — The Straddle — The Spread — Objections to Option Trading — Dishonesty in Option Trading — Guaranteed Options — The Option as a Legitimate Hedge.

Chapter XXI. — Principles of Trading 511

Trading Implies Short-Term Operation — Advantages of the Trader vs. Those of the Investor — Technical vs. Fundamental Factors — Discounting the Future — Selling When the Good News is Out — Following the Crowd — Crossing the Crowd — Wait for the Ideal Situation — Openings and Overnight News — The Unexpected Usually Happens — The Insiders and Market Profit — How to Become an “Insider” — The Market Student vs. the Public — Window Dressing Movements — Week-End Profit-Taking — Significance of Closing Prices — Tides of the Day's Trading — Some Wall Street Rules — The Secondary Reaction — The Resistance Point — The Support Level — Arbitrage Operations — An Example of Arbitrage in Split-up Stocks — Dangers of Arbitrage.

Chapter XXII. — Taking the Worry Out of Stock Trading 536

Apologia — A Wall Street Formula — Disadvantages of the Stop-Loss Order — Advantages of the Stop-Loss Order — Stop-Loss Order as Protection Against Stubbornness — A Formula for Accepting Profits or Losses — Protecting Profits with the

Progressive Stop — The Formula System vs. the Progressive Stop — Buying at Support Levels — Limits of Profit and Loss — Testing Market Ability Without Financial Risk — Paper Trading — Calculating Ability from Paper Trading — Avoid Over-Confidence — Successful Trader Need Not Be in New York — The Psychological Aspects of Trading — The Psychological Upset — Successful Trader Avoids Upsets — Analyzing One's Psychological Fitness — Prescription for the Psychological Upset — The Trader's Vacation — Dangers of Setting a Definite Profit Goal — Resist Temptation to Over-Trade — Beware of Over-Confidence After Long Success.

Chapter XXIII. — The Technical Side of the Market . 558

Fundamental vs. Technical Factors — Technical Considerations Most Important in Trading — Actual Observation is Necessary Basis — The Natural Technical Factors — Normal Extent of the Intermediate Reaction — Degrees of Strength in Extent of Reactions — Natural Reasons for Resistance and Support Levels — Importance of Closing Prices — The Artificial Technical Factors — Pool Operations — Managing the Pool — Economic Service of the Pool — Four Stages of Pool Operation — Pool Distribution — The Bear Pool — Accumulation at Close of a Bear Pool — Importance of Proper Pool Management — Pool Must Have Logical Ends in View — Matched Trades and Wash Sales — Analyzing Pool Operations — Detecting Pool Manipulation — Studying a Pool Stock's History — Banking Operations as a Technical Factor — Banks as Sponsors of Individual Stocks — Forms of Banking Sponsorship — Banking Support Levels — Supporting the General Market — An Example of Banking Support — A Close-up Chart on Banking Support — Chart Example of the Secondary Reaction — Secondary Recovery in Major Declines.

Chapter XXIV. — An Introduction to Chart Reading . 591

Charts as an Aid to Technical Analysis — Charts as an Aid to Memory — For Past Action — Dangers of Chart Reading — Types of Stock Chart — What to Include on the Stock Chart — Deciding on the Proper Scale — Arithmetic vs. Logarithmic Scales — Advantages of the Logarithmic Scale — Making One's Own Charts — Where to Buy Charts Ready-Made — Propor-

tion of Pool Stocks — Detecting Pool Manipulation by Charts — Seven Cardinal Chart Forecasting Formations — The Head and Shoulders Formation — The Common Turn — The Triangle, or Coil — The Triangular Bottom — The Triangular Top — The Ascending Bottom — The Descending Top — The Double Bottom — How the Chart Approves its Own Forecast — The Triple Top and Bottom — The Complex Formation — The Broadening Formation — Summary of Seven Major Chart Formations.

Chapter XXV. — Principles of Chart Trading . . . 622

Importance of the Triangle Formation — Time Element in the Triangle Formation — Discovering Precedent — Analyzing the Chart on Miami Copper — Time Element in a Distribution Triangle — Three Major Types of Triangle — The Descending Triangle — The Ascending Triangle — The Intermediate Triangles — The Ascending Peak — The Descending Bottom — Intermediate Reversal Formations — Irregularity on High Volume Forecasting Reversal — The Element of Volume Indicating Distribution — Charting the Resistance and Support Levels — Recurrence of Support Points — Trading on the Support Point — The Support Level Broken — The Resistance Level Broken — Switching the Position — Reversing the Market Position with Stops — The Shake-out or False Move — Defense Against the False Move — Shake-outs and Closing Prices — The Technical Trend — Illustrating the Technical Trend — Intermediate Trend Lines — The Trading Gap or Spread — The Break-away Gap — The Exhaustion Gap — The Three Types of Gap — Chart Examples of the Gap — Summary of Important Chart Formations.

Chapter XXVI. — Long-Swing Movements . . . 658

The Trader vs. the Investor — The Pull vs. the Swing — Long-Swing vs. Short-Swing Operation — Cyclical Swings in the General Market — The Business Cycle — Limitations of the Cycle Theory — Advantages of the Cycle Theory — A Statistical Study of Five Methods of Stock Trading — Results of the Five Tests — Importance of the Study — Results for the Long-Swing Trader — Results for the Long-Pull Investor — Danger of the Long-Pull Method — The Psychological Handicap of the Long-Pull Investor — The Investment Trust — Analyzing the Investment Trust — Types of Investment

Trust — Long-Swing Trading as an Ideal — Calling the Turns for the Long-Swing Operator — Correlation of Business and Long-Swing Stock Movements — Forecasting the Business Future — The 60-Year Stock Index — Correlation of Interest Rates and Long-Swing Stock Movements — The Lag Between Interest Rates and Stock Movement — The Credit Situation as a Technical Factor — Applying the Seven Chart Formations to the General Market — Thirty-Year Chart Analysis — Time Element in the General Market — The Daily Stock Chart from 1926 through 1929 — Following the Moving Picture Day by Day — Why the Bull Market Almost Ended in May, 1929 — Gaps in the General Market — The Stock Market Panic of 1929 — Extent of the Declines — The Fundamental Situation — Fundamentals Turn Unfavorable — What Caused the Panic — How One Collapse Affects an Inflated Market — The Technical Situation — Technical Signals Forecasting a General Reaction — The Final Signal — Forecasting the Extent of the Panic — The Final Support Level Holds — Lessons of the 1929 Panic — The Future.

Chapter XXVII. — Conclusion and Review 693

Co-ordinating the Material — Bond Prices as a Stock Index — Characteristics of the End of a Bull Market — Beginnings of a Bear Market — Characteristics of the End of a Bear Market — Dangers for the Long-Pull Investor — Why the Public Loses — Being Right Too Soon — The "New Era" Credo — The "New Era" in 18th Century England — False Starts in Major Reversals — Getting the Public "Used" to False Market Action — Defense Against the False Start — Scale Buying as Protection for Long-Swing Campaigns — "Selling Against the Box" — Liquidating Without Disturbing Actual Stock Certificates — An Example — The Final Review — Conclusion.

Appendixes

	PAGE
A — Chronology of New York Stock Exchange	713
B — New York Stock Exchange Firms in New York City (with street addresses)	718
New York Stock Exchange Firms and Other Offices of Mem- bers Outside of New York City	734
C — List of Member Firms of Outside Stock Exchanges (with street addresses)	754
I. New York Curb Exchange	754
II. Chicago Stock Exchange	759
III. San Francisco Stock Exchange	762
IV. San Francisco Curb Exchange	766
V. Baltimore Stock Exchange	768
VI. Cincinnati Stock Exchange	770
VII. Cleveland Stock Exchange	771
VIII. Columbus Stock and Bond Exchange	771
IX. Detroit Stock Exchange	772
X. Hartford Stock Exchange	773
XI. Los Angeles Stock Exchange	774
XII. New Orleans Stock Exchange	775
XIII. Philadelphia Stock Exchange	777
XIV. Pittsburgh Stock Exchange	781
XV. St. Louis Stock Exchange	783
XVI. Washington Stock Exchange	784
XVII. Buffalo Stock Exchange	785
XVIII. Minneapolis-St. Paul Stock Exchange	786
D — N. Y. S. E. Securities and Their Ticker Symbols	788
E — List of 10-Share Unit Stocks on the New York Stock Ex- change	809
F — Table for Quick Calculation of Approximate Annual Yields	812
G — Stocks Included in Representative Market Averages	813
H — Market News Factors — When and Where to Look for Them	817

	PAGE
I — Examples of Arbitrage Operation	824
J — Sloan Tests with Five Different Trading Theories	828
K — Data on Charts and Statistical Series	829
L — Description of Britain's "South Sea Bubble"	832
Bibliography of Recommended Books on the Stock Market and Allied Subjects	
	834
Index	839

List of Illustrations

	PAGE
1. Map of Wall Street District	<i>Frontispiece</i>
2. New York Stock Exchange	<i>Opposite</i> 26
3. Floor of the New York Stock Exchange	<i>Opposite</i> 29
4. Old Style Trading Post	<i>Opposite</i> 31
5. New Style Trading Post, Side View	<i>Opposite</i> 32
6. Customer's Agreement with Broker	45
7. Section of Ticker Tape with Translation	52
8. Buy Form with Order	54
✓ 9. Sell Form with Order	54
10. Limited Buy Order	57
11. Cancellation Form	57
12. Floor Buy Slip	61
13. Floor Purchase Report Slip	61
14. Customer's Purchase Report Slip	67
15. Customer's Sales Report Slip	67
16. Floor Sales Slip	70
17. Floor Sales Report Slip	70
18. New High-Speed Ticker	<i>Opposite</i> 76
19. The Simple Comparison	88
20. Seller's Deliver Ticket	96
21. Sales Ticket	97
22. Buyer's Receive Ticket	98
23. The Night Clearing Sheet	100
24. Deliver Balance Ticket	110
25. Receive Balance Ticket	111
26. Contingent Debit List for Regular Stocks	116
27. The Final Receipt	120
28. The Collective Delivery Ticket	125
29. Three-Way Central Delivery Ticket — Part 1	126
30. Three-Way Central Delivery Ticket — Part 2	128
31. Three-Way Central Delivery Ticket — Part 3	129
32. Contingent Debit List Pledge	131
33. Three-Way Exchange Ticket for "Ex" Stocks — Part 1	132
34. Three-Way Exchange Ticket for "Ex" Stocks — Part 2	133
35. Contingent Credit List for "Ex" Stocks	134
36. Contingent Debit List for "Ex" Stocks	135

	PAGE
37. Deliver Credit Ticket for "Ex" Stocks	137
38. Deliver Charge Ticket for "Ex" Stocks	138
39. New Style Trading Post, Rear View	<i>Opposite</i> 198
40. Odd-Lot Floor Buy Slip	199
41. Odd-Lot Floor Sales Slip	199
42. Odd-Lot Floor Purchase Report Slip	201
43. Odd-Lot Floor Sales Report Slip	201
44. General Demand Loan Agreement	226
45. New Loan Application Form	230
46. New Loan Agreement	234
47. Return Loan Agreement	236
48. Customer's Purchase Confirmation	255
49. Customer's Limited G. T. C. Order Confirmation	257
50. Customer's Limited Day Order Confirmation	259
51. Ex-Dividend Notice on a Limit Order	261
52. Customer's Bill of Sale	263
53. The Customer's Monthly Statement	267
54. A Discretionary Trading Agreement Form	286
55. Chicago Stock Exchange Trading Floor	<i>Opposite</i> 292
56. San Francisco Stock Exchange Trading Floor	<i>Opposite</i> 294
57. Sample Bond Certificate	<i>Opposite</i> 307
58. Sample Bond Coupons	<i>Opposite</i> 310
59. Sample Ownership Certificate for Coupon Deposit	311
60. Sample Preferred Stock Certificate	<i>Opposite</i> 315
61. Sample Warrant from Bond	326
62. Sample Warrant from Preferred Stock	329
63. Sample Common Stock Certificate	<i>Opposite</i> 331
64. Reverse Side of a Common Stock Certificate	334
65. Sample Warrant on Common Stock	337
66. Sample Voting Proxy	343
67. Sample Balance Sheet (General Motors Corporation)	388
68. Sample Earning Statement (Sears, Roebuck & Co.)	394
69. Indexes of Price-Earnings Ratio, 1913-30	415
70. Graphic Form of Stock Analysis	421
71. A Portion of the Bond Page	452
72. Comparison of Business and Stock Market Indexes, 1872-1930	463
73. Federal Reserve Bank Compilation of Brokers' Loans	471
74. N. Y. S. E. Brokers' Loans and Brokers' Loan Ratio Index	475
75. Daily Range of General Stock Averages, 1928	533
76. Graphic Illustration of Coupled Trading	543
77. Daily Chart on Radio Corporation, 1928	563
78. Daily Range of General Stock Averages, 1929	587

LIST OF ILLUSTRATIONS

xxix

	PAGE
79. Comparison of Arithmetic vs. Logarithmic Scales	596
80. Arithmetic vs. Logarithmic Movement	597
81. Daily Chart on Westinghouse Electric, 1928	603
82. Daily Chart on American Sugar, 1927	605
83. Daily Chart on New York Central, 1927-28	607
84. Daily Chart on Worthington Pump, 1925	609
85. Daily Chart on General Motors, 1928	611
86. Daily Chart on General Motors, 1929	613
87. Daily Chart on General Asphalt, 1926	615
88. Daily Chart on New York Central, 1926	617
89. Daily Chart on Radio Corporation, 1927	619
90. Daily Chart on Chrysler Motors, 1927	620
91. Daily Chart on Miami Copper, 1927-28	624
92. Daily Chart on Miami Copper, 1928-29	625
93. Daily Chart on Virginia-Carolina Chemical, 1922-23	627
94. Daily Chart on Goodyear Tire, 1928	629
95. Daily Chart on American Woolen, 1925	631
96. Daily Chart on Chrysler Motors, 1928	633
97. Daily Chart on Cerro de Pasco Copper, 1926	635
98. Daily Chart on General Railway Signal, 1927	639
99. Daily Chart on Radio Corporation, 1926	649
100. Daily Chart on Du Pont, 1927-28	655
101. The 60-Year Stock Index and Interest Rates Compared, 1872-1930 <i>Opposite</i>	675
102. The Dow-Jones Industrial Stock Index, 1897-1930	679
103. Daily Stock Index Chart, 1926-30 <i>Opposite</i>	683
104. Dow-Jones Bond Average, 1915-30	695
105. Chart on Bank of England Stock, 1697-1928	703

PART ONE

CHAPTER I

INTRODUCTION

Knowledge of Working Materials is Essential

Before we can understand the stock market and turn intelligent eyes upon its workings, its technique and methods of making profit from our study, it is imperative that we know first the nature of the fundamental goods with which we are dealing. The student of medicine must know before he begins his technical course of study the general nature of the physical body with which he will deal. The engineer, before he begins his study of stresses and strains, must be versed in the fundamentals of the physical substances with which he will work.

It is just as important that the student of securities and the stock market shall know, before he begins the study of technical considerations and methods of operation, the fundamental nature of the physical goods with which he is going to deal. And much of the confusion which now surrounds the motivating forces of security market operation, leading to eventual failure and loss, might be avoided if the potential market operator were more thoroughly grounded in the fundamental characteristics of the actual goods in which he deals.

Stock market operation has been made so easy, so readily available to the general public, in recent years that there is a lack of apparent necessity, and therefore a lack of genuine desire, for knowledge of the properties which form the basis of buying and selling stocks.

So far from being versed in these fundamentals, buyers have developed a growing tendency toward acting merely on hearsay, operating on brokers' advice, on the circulation of tips — a tendency due not merely to the rapid growth of stock market speculation, but also to the long period of easy profits in the bull markets of recent years.

Examples of Public Ignorance

There are classic examples by the score which afford the stock market fraternity much amusement but which indicate a trend whose potential results are not merely dangerous but suicidal. Some of the classics include the gentleman who bought Corn Products Refining because he thought well of the crude oil and refining group, who thought Airway Electric Appliance was an aviation stock, who sold Hoe Company stock short in anticipation of a decline in farm buying, and assumed that Howe Sound was one of the new talking motion picture concerns.

Most of these stories are perhaps figments of a fertile storytelling imagination on the part of customers' men or room traders who wanted to spread an atmosphere of good cheer on some day when prices were going rapidly downward.

The tendency is there, nevertheless, as further exemplified, to cite merely a single personal instance, by a letter received soon after the listing of Alleghany Corporation on the Big Board. The correspondent held some stock of the old Pittsburgh Coal Company and by a somewhat intricate process of reasoning inferred that the Alleghany Corporation had taken over her company and she would exchange her Pittsburgh Coal stock for the stock in the new company, which, of course, was formed by the Van Sweringen interests chiefly to hold railroad securities.

There has also been what appears a serious attempt at explaining an unexpected run-up in the stock of Seaboard Air Line early in 1929. The tale, vouched for on good authority, is that officials made a thorough investigation of the buying which came into their stock from unidentified sources. They were not able to run down all of such purchases but found that it came from all over the country and in small lots of 10 to 50 shares — buying which appeared to be based upon the intention to hold for large market appreciation over the long-pull.

The officials who made the investigation were able to get enough individual replies from such purchasers to convince them that at least a large portion of the public purchases in Seaboard Air Line stock were made by people throughout the country who

thought it was engaged in aviation transport service, had faith in the promised profits for aviation stocks and purchased without verifying their understanding of the company's business.

No wonder, then, that the recent era of stock market speculation has been termed a dangerous one — no wonder at stock market panics and huge personal losses — when individuals throw their money, much of it the result of long years of frugal saving, into the market thus blindly, with no adequate knowledge even of the stocks which they are buying, to say nothing of the general physical properties which underlie all property traded in on stock exchanges.

Three Main Types of Corporate Security

The fundamental basis for understanding the true meaning of stockholding is the factor of ownership as it applies not to the stock certificate so much as to the physical properties represented by that certificate. Modern corporation capitalization is divided roughly into three major groups of securities — bonds, preferred stocks and common stocks. The bond is similar to the corporation's note, promising to repay a loan at maturity with certain stated rate of interest. The bondholder, therefore, is a creditor, not a part owner, of the corporation.

The common stock is the insignia of actual part ownership. The surplus assets of the business belong to the common stock, after claims of the bondholders, or creditors, and other prior claims are paid off, either practically or theoretically. The bondholder, being a creditor, is practically certain of receiving his principal and interest but he receives no more than that. The common stockholder, being a partner or part owner of the business, accepts the risks of such business. He is not certain to receive anything from his investment. On the other hand, if his business prospers, his profits are unlimited.

Bonds vs. Preferred Stock

Between the bond and the common stock stands the preferred stock. It is like the bond in that it receives generally a certain

fixed rate of return and no more. It is like the common stock in that the regularity of its return depends upon the company's profit or prosperity. The corporation will pay interest on its bonds as long as possible no matter how bad business or profits may be, since failure to pay such interest amounts to default of legal obligations and leads generally to receivership and failure. If possible, the corporation will pay the regular dividends on its preferred stock but failure to pay is not critical. In any case, the corporation's net profits go first to pay the regular dividends on the preferred stock. The common gets only "what is left," but it gets all of that. We shall study the forms of corporate security issue in greater detail in a later chapter.¹

The Common Stock

The common stock, therefore, takes the big chances of either profit or loss, standing as the actual "owner" of the corporation's business. For this reason much greater care, study and judgment are necessary in dealing with common stocks than with the other forms of corporate security, and we shall concern ourselves largely with this particular type of issue. The common stock presents greater risk, but it also offers the chief opportunity for unlimited profit. It is the security representing true ownership in corporate business. And this aspect of true part ownership in physical and producing property is at the corner stone of our understanding of the true meaning of stock market trading.

What Stock Ownership Means

How many of the small investors scattered throughout the country who have bought small lots of United States Steel Corporation common stock in the last few years visualize the meaning and the significance of the paper stock certificate which they hold? They are more likely to look upon it merely as a negotiable instrument whose fluctuating price is reflected in the morning and evening newspapers.

¹ See Chapter XIV.

Yet this small and insignificant piece of paper represents ownership. It represents property. It represents a portion of one of the greatest industrial enterprises of the modern world. Here are millions of acres of valuable property, located throughout the globe. Here are hundreds of square miles of huge factories, their modern and co-ordinated machinery working with a precision and a singleness of purpose almost unbelievable. Here are huge smokestacks pouring forth the insignia of active and profitable operation.

Here are hundreds of miles of railroad track, with long trains of heavily laden cars, bearing raw materials to the huge plants and bearing finished products to a consuming world. Here are great coal and iron mines, with steam shovels laboring by the hundreds, with thousands of men burrowing through tunnels in the depths of the earth to extract valuable ore and raw materials.

Here are mighty fleets of ships, all kinds and all classes, sailing across the seven seas, carrying goods to every corner of the globe. Here are properties, plants, offices in hundreds of great cities in foreign countries scattered throughout the civilized world. Here are branch offices, sales offices, representatives, hospitals, libraries, lawyers' offices, great civic settlements providing homes for thousands of workmen and their families, banks, stores — in short almost every conceivable adjunct of modern productive and consumptive life.

And this modest little piece of paper, this stock certificate, represents part ownership of all this vast domain of wealth. This unassuming, perhaps unthinking, member of the common people, is a part owner, a part manager, a part executive in this tremendous cavalcade of wealth, of progress and of industry.

Ownership Principle is Fundamental

He has not purchased a scrap of paper. He owns not merely a negotiable instrument which may be here today and gone tomorrow — whose value lies in the quotations of today's stock market. Here is something real, something vital, something productive. Here is true personal property. Here is a portion

of this man's productive, and potentially profitable, business, just as real as is his weekly pay envelope, his position at the mechanic's bench, his stool in the bookkeeping department, his grocery store or his insurance business.

It is this idea which the stock market operator must instill into his mind and being before he may know the fundamental basis of stock market trading. This theory is the very corner stone of his future study, just as is the nature of the physical body to the medical student or the theory of human relationships to the student of law.

The true realization that one is dealing not in stocks and bonds, not in debentures and trust certificates, but in great productive properties, in businesses and industries, is one of the most fundamental bases underlying any study or understanding of the stock market and stock market operation.

Essence of Buying Stock is Ancient

The process of telephoning one's broker and transmitting a buying order to him today is fundamentally no different than the procedure of the Roman citizen 2,000 years ago who traded pieces of gold and a collection of precious stones for a plot of fertile ground, and its resident slaves, adjoining the Appian Way.

The man who buys a stock through his broker today exchanges something of value which he previously owned, for something potentially productive which he has decided will bring him greater eventual value or greater return in the future, than the goods which he surrenders in exchange. Mr. Tiberius Polonius did the same sort of trick when he bought his Appian villa. He exchanged gold and precious stones for a piece of property which he presumably expected would provide him greater value, either physical or in psychic return, than would the gold and jewels. The difference between the transactions is merely one of degree, merely one of much greater complexity accruing to our present day intricate system of living and finance.

To a certain degree it is true, as often alleged, that the "big

business" and the great wealth of our country are concentrated in the hands of a comparatively small number. But realization of the fundamental principle that every stock market operator and every owner of stock is a small capitalist will help not merely in seeing how widespread this modern partition of big business ownership has made the nation's industrial assets, but will also assist, as has been previously noted, in a better understanding of the stock market itself.

It is argued, with some justification, that profits in industry are accruing in constantly greater proportion to the constantly diminishing group of "key combinations in key industries," the size of whose domain and business control is constantly increasing. It is argued that the increasing proportion of profit for these huge trust combinations is being made at the expense of the small manufacturer, the small dealer, the small wholesaler or retailer. In short, that the "big ones are gobbling up the little ones."

Buying Into the Larger Business Organizations

There would appear to be some definite unfairness to the smaller companies who are not invited to join the growing combination in its onward march of mergers and absorptions. But there are two answers to such an argument. One is that the concerns which are left out of the big business combinations are generally either those that refuse to be taken in and therefore have only themselves to blame, or are those whose management and general position in the industry has made them less profitable than the others and are therefore doomed to eventual failure and elimination by the natural laws of "the survival of the fittest," especially true in business competition.

The other answer to the unfair argument with regard to the smaller companies which are left out of growing merger combinations is that the ownership of minority interests in most such big business establishments rests in the open market. And here we tie up with the fundamental basis of stock market operation which we have previously explained; namely, that the purchase

of stocks is ultimately merely the purchase of a portion of some great business enterprise.

The small company and the individual, originally left out of the onward march of big business and big profits, are at all times free to bring money to the open stock market and buy a part of that big business, if there is faith in it and in its continued advancement and increment of profit.

Largest Corporations Owned by the Public

What has actually happened in recent years is directly dependent upon this view of stock purchasing as a sharing in the benefits of the modern industrial trend toward co-ordination of many small businesses into a comparatively small number of big businesses. The individual (as well as the small corporation), in spite of Congressional investigation, which we have always with us, has seen the benefits resulting from such co-ordination, and has found that the chief and most logical method of sharing in the benefits of America's great march toward world industrial supremacy lies in purchasing a share of those big business units which are leading the procession.

And that great principle accounts in large measure for the popular desire so evident in recent years, for the purchase of stocks in growing enterprises. The small business man who has seen his business losing out to the larger units has transferred his interests into those larger units by the purchase of their stocks and has benefited by the rapid appreciation of his interest in the larger unit, as an offset to the business his own small unit has lost to the stronger combination.

Increased Stock Market Interest is Logical

The independent retailer has been bought out through exchange of stock, by the great unit in his field, or else he has bought a share in the big business through purchase of its stock in the open market. The corner grocery store proprietor has either received stock in exchange for his store or he has gone

into the open market and purchased such stock of the big chain grocery store that is perhaps superseding his independent establishment.

Likewise, the individual has realized the trend of greater profits to the greater units in each field. He has hastened to get his share in this rapid development of American wealth and American prosperity. And he has nearly always been able to do so through purchase of the stock of the big combination in the open market. Little wonder that the demand for stock market understanding has increased so sharply in recent years.

From the angle not merely of the average American business man, therefore, but from every contributing or associated angle, study of the stock market is important in the modern era. But it is just as important that the student of the stock market and of stock market trading shall enter his study with a clear understanding of our basic principle of stock purchase and stock ownership. For such purchase and such ownership is much more than speculation, much more than gambling, much more than the mere purchase of a piece of paper or a share of stock.

The individual who is buying and selling stocks in any market is not doing merely that. He is buying and selling actual property. He is trading in the physical representation of the most fundamental factor in the world today and in its civilization and progress. He is buying and selling the productive industries of the world, the physical organizations which are producing our wealth and making possible our progress.

CHAPTER II

THE STOCK EXCHANGE

Economic Value of the Stock Exchange

If the potential stock market trader has achieved the "productive physical property" view of buying and selling stocks in the market, as outlined in our introduction, it will be a comparatively simple step to an understanding of what the stock market truly is. Such a view will assist greatly in a discussion of the economic value of the stock market and also in defining the various personal attitudes toward the market and toward market operations.

Much has been said, and perhaps just as much written, regarding the economic value of the various stock markets and the place of the stock market operator in our economic picture. The answer to this question is closely bound up with values in which they deal, and this, in turn, with the fundamental notion of stocks as equities in physical productive properties.

The Ancient Method

When Tiberius Polonius stood in the market place and formulated plans for acquiring his Appian villa, his own life, his contemporary age and the condition of business transactions were all comparatively simple. Time was not nearly so valuable then as now. Life and business developments moved at a snail's pace compared with the rapidity of modern business. Tiberius and his fellow business men of Rome were comparatively few in number. They had plenty of time. They were living in a fairly compact world of physical and psychic values. The villa was owned by one man, probably a friend, or at least an acquaintance, and Tiberius could conduct his negotiations for purchase in person and drive a bargain at his leisure.

Gradually, down through the intervening centuries, the world and its population have grown. Boundaries have expanded, and industry and manufacturing have developed the much more rapid production of wealth and goods from raw materials. Inventions and machinery have driven production forward at a constantly increasing tempo. They have called for more rapid raising of larger sums of capital, with resultingly larger and more rapid increase in profit and the fluctuations of profit.

Modern Development

With the advent of the mechanical age and large-scale production, the individual craftsman has gradually faded from the picture. He has been succeeded by the banding together of various individuals and various capitals for the more rapid and more efficient handling of industry. These developments have shaped themselves gradually, but perhaps the most rapid progress was that made in England during the 17th and 18th centuries, eras parts of which were quite rightly termed new editions of the "golden age."

They were eras whose prosperity resulted from such new factors as the huge gold discoveries in the Spanish realms of Mexico and South America, the resulting cycles of rapidly rising commodity prices, invention of many types of machinery, including the power loom, and a period not so dissimilar from our own history of the past 10 years, when public imagination was fired with the tremendous strides being made by civilization and the tremendous profits possible for growing industrial enterprises.

"Limited Liability" Aids Stock Popularity

Not until early in the 18th century, however, did the gradual development of the corporate financial structure come to its full flower. Then came the important principle of "limited liability" of stock ownership; in other words, legal rulings that the stockholder of a company, in event of his firm's failure, could not be held liable individually for a greater amount of capital

than he had actually invested in it in the purchase of his stock interest.

This removed the chief disadvantage of previous stock ownership and made stockholding a comparatively safe and much more popular pastime. Individual groups and corporations found that they could not supply stock to the public fast enough, and the combined result of such a scarcity of stock and the definite prosperity of many such popular enterprises was a decided enhancement in the value of such stock as was outstanding. Individuals found that they could anticipate the popular demand for good stocks of growing concerns. And there, as an economic answer to an economic problem, developed the business of specializing in the buying and selling of stocks and other securities.

The Broker and the Theater Ticket Agent

The business developed largely as has the theater ticket business in our larger cities. In New York especially, the demand for theater tickets outstripped the supply. People with ready money were willing to pay a commission, or a premium, to get what they wanted when they wanted it. And the answer was the development of the theater ticket agencies. Such agents found they could anticipate popular demand for theater tickets. They specialized in the business and made money. And behold, a new business was born.

Likewise, in the England of the 18th century people who had money were willing to pay a commission to specialists who were able to get them stock which the individual, perhaps, was unable to get, or did not know how to get, or did not have the time to get. And specialists sprang up in the business of buying and selling stocks and other corporate securities. And, gradually, these specialists found it easier to congregate in certain stated places to make bargaining for such securities easier, simpler and speedier. And the first rudiments of the present day stock exchanges were formed.

It matters little, in tracing the development of the modern stock markets, whether the people whose demand for service

brought them into being, realized that they were trading in physical properties or merely in speculative pieces of paper. But in theory, and for understanding our own present day exchanges, it does matter that we understand that every stock purchaser, from the beginning of corporate security issue down to the modern time, traded in productive property and not in stock.

Economic Value of the Stock Broker

Such realization is important in understanding the economic value of current markets for the buying and selling of securities. The economic value of the stock broker has just been described and is readily apparent. The economic value of the stock market operator is not so readily apparent. Both the broker and the operator are closely bound in with the economic value of the stock market itself, but the broker is much closer.

The stock broker is a trade agent whose chief business is to execute orders given him by his customers to buy or sell securities, for which service they pay him a fee, or a brokerage commission. The stock broker may give advice, he may maintain margin accounts for his clients, he may perform a great variety of other services for his clients, either with or without charge, but the fact remains that fundamentally his chief business is to execute orders for the buying and selling of securities which, we have previously decided, are merely the insignia of ownership in physical productive assets.

The stock exchange is an organized meeting place, generally guarded by strict rules of procedure for safety's sake, where security brokers who are members of the exchange may gather to execute their orders for the purchase and sale of securities, at prices fairly established through free and open bargaining.

The Market Operator

The stock market operator is a term generally applied to an individual who makes a fairly regular practice of ordering the

purchase and sale of stocks, usually through a stock broker and usually through the duly organized stock exchanges, paying commissions to his broker for the execution of such orders.

We have previously seen, in a consideration of how economic need brought about the development of stock brokers, that they developed as an economic necessity. In like manner the stock exchanges themselves have developed through the brokers and likewise as a result of economic need.

But the considerations which we have previously examined emanated chiefly from the need of and desire of the public who wished to buy stocks or property equities, and were willing to pay for execution of their desires and orders. But in a much larger and more important sense, the stock broker and the stock exchange of today serve a decided economic function from the standpoint of the corporation, or productive property, itself.

Raising of Capital Expedited

At the beginning of the corporate era, individuals banded together somewhat privately, pooled their funds and organized their corporations without much outside assistance. Gradually, however, as the need for additional capital expanded, personal circles of friendship were no longer adequate to raise sufficient capital, and corporations were forced to go outside their own private coterie and solicit funds from the public.

And the public, as has previously been shown, was often quite as willing and desirous of investing in the corporation as the corporation was desirous of getting the public's capital. Gradually, there developed the stock broker's and the investment banker's service to industry — the floating and public sale of corporation stock, of equities in the company's physical entity, resulting in an ever-increasing field from which the corporation might draw its capital, facilitating the ready and speedy collection of such capital, and producing it for new and untried corporations who needed it for their future industry and expansion.

And in just the same way the stock exchanges of our day serve

the same purpose as the stock broker and the investment banker, in making readily available huge sums of capital for the development of new industries and the expansion of old ones.

Economic Value of the Market Operator

But what of the stock market operator? What purpose do you and I serve, who buy and sell stocks fairly regularly? Are we economically important? Most assuredly we are, and the point is too apparent to need much argument. The stock market operator is the "public," that term which we have so often previously used, and which is so roundly abused in the common parlance of the stock market.

We shall see that the stock market operator may partake of three different classifications, depending upon the ends which he has in view when he first begins his individual operation. But it matters not to which of the three classes he belongs, the stock market operator is a regular purchaser of stocks. He has money to place in securities which he considers to represent attractive and promising corporations.

His money and his interest, after all, are the backbone of the industrial and economic development of the nation. He need not take an active part in the management of his corporation — he designates others more specialized and better fitted for the job. But he is the backer of the project. He supplies the capital, the confidence, the basis upon which the country and its industries go forward in their indispensable labor of production of goods and wealth.

No matter in which of the three subheadings he falls, the stock market operator occupies a prime position of fundamental value in the economic construction of our modern corporate and industrial fabric.

Three Classes of Market Operator

The three classes of stock market operator which are generally admitted and which we agree are outstanding include the investor, the speculator and the gambler.

Most authorities on the subject of stock market trading and its theories distinguish the three types according to the method used in securing income from their commitments. But it is perfectly clear in the writer's opinion that the diversification of classes must be based upon the plan and intent of the purchaser and is in no wise directly dependent upon the quality of the security.

Simply because a man buys a stock which is commonly considered a very strong security and a high grade investment issue is no sign that he is investing in that stock. He is only investing if he buys it with the intention of investing. If he buys it with the idea of taking a risk in it, of profiting by assumption of that risk and selling again in the near future at a higher price than he paid, then it matters not how decisive the investment caliber of the stock he bought. That man is not investing. He is speculating.

Prof. H. C. Emery¹ holds that investment is the purchase of "income-yielding property in order to get an annual income," while speculation is found in the "buying and selling of securities in the hope of a profit from anticipated changes in value." Mr. S. S. Pratt,² on the other hand, holds that "income and safety are essential in investment; risk and profits in speculation." We incline more favorably, however, to the views of Prof. J. E. Kirshman, who emphasizes more the element of motive in the purchase. He says,³ "The investor buys primarily in order that he may secure an annual return; the speculator buys primarily in order that he may profit by buying at a low price and selling at a high price . . . the former makes his decision on the basis of income; the latter on the basis of profit."

Speculation vs. Investment

The author agrees with such authorities on some of their points and also disagrees with all of them on other points. The primary

¹ Emery, H. C., "Speculation on Stock and Produce Exchanges of the United States," p. 96.

² Pratt, Sereno S., "The Work of Wall Street," Chapter VI.

³ Kirshman, John Emmett, "Principles of Investment," p. 13.

basis for differentiating between investment and speculation seems to lie in the amount of risk assumed. Income on the one hand, and market profits on the other, are no doubt motivating forces, but they are secondary and they do not affect the fundamentals of the two classes of trading.

There have been a great many new companies organized within the past few years which were so well sponsored, had such assured futures and such substantial backing that they might have been, and, indeed, they were, recommended as investments, and rightly so, even though at the beginning of their career they paid not a cent in dividends. Here were cases in which an investment stock partook of that quality without offering any immediate yield at all. The investor bought them for income in the future, perhaps, but he might also have purchased them for gradual market appreciation over the long-pull. They were investment issues in the true sense of the word so long as the individual purchased them because he considered his principal quite safe and anticipated a market profit in them by holding them over a prolonged period of time.

Again, the investor who bought Liberty Bonds at around 85 in 1920 was getting a good yield, but he would hardly have deserved the term of a speculator merely because he anticipated their advance to parity in the course of the next two years. In this case, market appreciation might have entered into his motives fully as much as current yield or income, yet so long as he bought them with the idea that his principal was safe over a period of years he would not, in the writer's opinion, forfeit the term of an investor.

The Element of Risk

On the other hand, a man who purchased Mother Lode Coalition Copper at around 10 in 1923, simply because it gave a current yield of more than 10 per cent., would hardly have been considered an investor. His motives were centered on income to the exclusion of any market appreciation, yet he was most certainly speculating on continuation of the dividend and the loca-

tion of new ore bodies to replace the diminishing known reserves which the company had in sight.

No, the basis for differentiation is by no means always one of income as against market appreciation. This is often the case but it does not cover all instances. The fundamental test which does cover all instances is that of safety of principal. The investor buys a stock because he feels that he can trust it to carry his capital safely over a period of years, without loss of principal and more likely with the promise of an increase in principal.

The speculator buys a stock because he feels that even while taking a risk as regards his principal, the probable profits to be made, either through income or enhancement in market value, compensate for the degree of risk involved. The speculator realizes that he is taking a chance — that there are possibilities of the stock going down rapidly instead of going up rapidly. But he has reason for feeling that the movement will be up instead of down, and he risks his commitment on the accuracy of his own judgment.

The Element of Time

There is also a decided time element which should enter into a discussion of the difference between investment and speculation, though it is not absolute and cannot therefore be incorporated into an iron-clad definition of the two classes. The tendency is for the investor to buy his stock for the long-pull, to be held over a long period of years, or perhaps indefinitely. The tendency of the speculator is to complete his transactions within a definitely limited time interval. The chief basis for classifying the speculator must always be the degree of risk assumed, but the speculator feels justified in buying a stock because he thinks it is going up 10 points within the next month, even though he also thinks that intermediate advance will be followed by a long-drawn recession of perhaps 100 points which may extend over a number of years. He is justified because part of his speculative theory is to act swiftly, get out fast with perhaps moderate profits, whereas the investor would very rarely think of buying a stock, no matter

how safe his principal, if he were not favorable toward it for the long-pull future.

The author recalls a letter from one of his clients who wanted to buy Chrysler Motors at around 85 in the late summer of 1928. He was familiar with the theory that profits of a newly merged or combined firm are wont to slide off anywhere from a few months to a year after consummation of the merger. The writer would never have considered Chrysler as a long-pull investment at that time, but stated that he merely wanted to take advantage of an apparently strong technical situation in the stock itself as well as in the industry for the period of about a month or six weeks.

The Element of Personal Attitude

Here was a case where not merely the risk involved, but also the time element, figured decisively in defining the nature of the transaction as a speculative one. The correspondent would have been successful if he had adhered to his original speculative theory. Instead, he switched from his correct purchase position on a short-term speculative basis to an investment theory which was not justified by the element of the time interval.

He purchased the stock at around 85 with the idea of selling out at around 120 by the close of the year. Instead of carrying out his original policy, however, he decided to hold for investment. The stock continued up to a high of 140 in October of 1928, and then started down, and the holder finally took a five-point profit at 90, after holding for nearly a year, instead of his possible profit of 50 points in six weeks, if he had sold at his original objective, decided upon from a speculative short-term standpoint.

Here is a clear-cut case of the difference between investment and speculation from the standpoint of the time element. The individual was quite justified in his purchase of Chrysler from a speculative standpoint but he was entirely unjustified in holding the stock from an investment standpoint. And the entire differentiation lay in the period of time over which he planned to hold the stock.

The investor, therefore, is primarily interested in safety of his principal, and is secondarily interested in income and market appreciation over the long-pull. The speculator is primarily interested in profit, either through high income or through market appreciation, in a comparatively short period of time, and regardless of the risk that if his judgment is wrong he may suffer loss of principal.

The Gambler

The third member of the stock trading fraternity is the gambler. This is an opprobrious term and should not be applied unless the nomer is clearly deserved. The epithet is being constantly used in a variety of cases which do not merit such rough usage, and most of the transactions which are popularly referred to as gambling are, in essence, nothing more than speculation.

The term is overworked and should be used advisedly, but there is no gainsaying that this third type of stock market trading does exist. It is the most difficult of the three classes to define. Theodore Price has perhaps come close to the true picture when he says that speculation is "hazard plus intelligence" while gambling is "hazard without intelligence."¹ The writer is inclined to accept some such definition, provided that the term "intelligence" may be taken in both of its apparent meanings — intelligence as regards the mental status of the individual making the commitment, and intelligence as regards the facts and the actual conditions surrounding and affecting the outcome of the commitment.

The latter terminology is the more important, however. The stock market trader is a gambler when he commits himself in a stock without any actual basis for expectation that the outcome of his commitment will be favorable to his position.

Even under this definition it is difficult to prove the existence of any great number of gamblers in the stock market. We are prone somewhat falsely to call those traders gamblers who com-

¹ Price, Theodore H. Formerly Editor of *Commerce & Finance*.

mit themselves in a stock simply on hearsay, or on the basis of unreliable "tips" and without having any definite information or ideas of their own to back up their action.

Gambling on Tips

In the recent era of speculation in the stock market, it might be estimated that at least 50 per cent. of speculative stock purchases were made as a result of tips to the public. This does not mean that all persons who bought stock on tips were gambling. The differentiation must depend upon the quality of the tip, hence, in the final analysis, upon the quality of the person from whom the tip is received.

And in the final analysis, therefore, we must go back to the first meaning of our applied term of intelligence — intelligence as regards the mental capacity of the individual making the commitment. Anyone who bought stock on a tip from unidentified, or unreliable and untested sources, was deficient in personal intelligence and most certainly must be termed a gambler, and not a speculator.

From a practical market standpoint, trading on tips is dependent upon the quality of the originator, but in general such trading, unless accompanied by some personal knowledge, personal ideas, personal reasoning or personal research, runs nearly always very near the boundary line of pure gambling.

Just Plain Gambling

Perhaps the clearest instance of gambling, however, is trading on the basis of a certain event, the outcome of which is neither known nor guessed with any basic reasoning by the trader. This is the most decisive case of taking hazard without intelligence as regards basic facts which must influence the outcome of the trade. There are plenty of instances where it is common knowledge that a stock will either advance or decline materially at an early date, depending upon whether certain news is favorable or unfavorable. So long as the outcome cannot be foretold in advance it is anybody's guess which way the cat will jump.

If the trader has information leading him to a conclusion, or if he has followed a logical train of reasoning which carries him to an advance decision, then he is justified in committing himself in the stock according to his conclusions, and he is still a speculator.

Fundamental Characteristic of Gambling

If, however, he merely "jumps" at a conclusion, without the backing mentioned above, then the only suitable term to be applied to his commitment is gambling. A recent case in point was the stock of Interborough Rapid Transit, which was bound to be materially affected in market value by the decision of the Supreme Court in Washington on jurisdiction in the New York City subway fare litigation.

The chances of a favorable decision were about 50-50, according to authorities, yet the writer knows many individuals who had taken one position or another in the stock, on a basis of their own personal reasoning and conclusion as to what the verdict of the Supreme Court would be. In so far as these individuals were sincere in their studies and conclusions they were speculating, and not gambling.

Yet the writer also knows at least one or two cases where individuals merely "took a chance" and played one side or the other. They were merely placing bets on an unknown conclusion, without any study, without any personal feelings or convictions. Those individuals, in the fullest sense of the term, were gamblers, and not speculators.

In general, it may be said that the gamblers, and also those traders who take "good tips" without personal information or professional advice, deserve the losses which they generally have eventually to take. There is little need in going into the comparative merits of the three groups of traders at this time. Trading methods will be discussed in a later chapter.

Suffice it to say that we would rank the classifications of trading in the order in which they have here been discussed — investment, speculation and gambling. Gambling is never justified

from a sound economic viewpoint. Speculation is only justified in certain instances and for certain traders who are either semi-professional, very close to the market, or are in other special circumstances justifying special risks. Investment is not always justified because the individual may be wrong in his conclusions, but it is more often justified than either of the other two classifications of stock market trading.

Rise of the Stock Exchange

We have seen that the various types of stocks and securities commonly traded in are merely instruments representing the part ownership of huge organizations of physically productive properties. We have traced, in loose and general form, the development of comparatively simple methods of ancient buying and selling of such securities, in Roman and British eras, up to the highly specialized methods of trading on present day stock exchanges. And we have seen that in its essence the buying and selling of stock in present day markets is no different than the buying and selling of such properties in the past. Only the scale of transaction has increased, and all of the machinery and technique of modern stock exchange operation is merely another element of the modern methods of advancing civilization and the tendency to do all constructive things on a much larger, more rapid and more efficient scale than in the past.

The stock market operator of today is perhaps more interested in the New York Stock Exchange than in any other one security exchange of modern times, and we can wax specific in tracing stock market development by reference to this great single institution.

The First New York "Exchange"

As early as 1752 we are told that New York business men had found it advantageous to have a particular meeting place for trading in their various financial interests. This first "Exchange" was used mainly for trading in various grains, cattle,

furniture and slaves, and was located near the foot of Broad Street.

In 1768 the Chamber of Commerce was formed to transact its trading in the historically famous Fraunces' Tavern, and soon after the Revolution a group of men who were interested chiefly in trading of stocks broke off from the other market places and established their own "stock market" under the convenient protection of the famous and wide-spreading buttonwood tree which stood near the present location of 68 Wall Street.

This form of security trading grew rapidly, with constant additions to the volume of outstanding securities available for trading, and in 1817 the little organization of buttonwood traders sought permanent shelter in an official stock exchange building, formulated rules for their guidance and conduct, and drew up a constitution for their organization, which was known as the "New York Stock and Exchange Board."

Such organization did not guarantee stability of residence, however. Trading methods were still rudimentary, procedure was exceedingly informal and the headquarters of the little group wandered uncertainly about the lower end of Manhattan Island for nearly 50 years, with a short space of time during which activities were ensconced in the dubiously impressive atmosphere of an old hayloft.

Development with the Nation's Growth

But business was constantly growing through these early years. From 1830 to 1860 the new nation witnessed the rapid and tremendous growth of the steam locomotive, with its network of lines spreading tentacles far out through the Western frontier districts. The Civil War period brought the introduction of currency based on gold standards. A tremendous amount of new credit was manufactured to meet the tremendous new demands. New territories were opened up, natural resources were developed, wealth was produced in volume and the United States experienced its first real taste of the "golden age" theory, when men predicted that a new era was come, that there were

unprecedented riches waiting for all, that the future would bring no recurrence of past depressions and hardships.

It was an unquestioned period of rapid development. The little stock trading fraternity occupied their usual strategic middleman position and flourished. There was a demand for more and more capital from the rapidly expanding governmental and corporate organizations of the nation. On the other hand there was rapid growth of popular wealth and a genuine demand for potentially valuable securities, engendered by popular confidence and a desire to share in future prosperity and profits. And the common meeting ground of capital and the corporate demand for capital was the stock exchange, then as always.

From 1865 to 1880 the stock exchange received the added impetus of development of modern inventive conveniences like the stock ticker, the first Atlantic cable and the telephone, all of which facilitated trading and aided the development of larger and more rapid transactions, to say nothing of public confidence.

The Ready Market

For besides its purely economic importance, the stock exchange has also the theoretical, or perhaps psychological, advantage of the ready market. The public was willing to invest its capital in the new and growing enterprise of the nation but not without some assurance that it could realize on the properties it bought, if sale of such properties was made suddenly necessary or advisable.

By maintaining a constant and ready market for the evidences of capital ownership, the stock exchange encouraged public confidence in values and accelerated the willingness to invest. Then, as now, such markets are the "buffers." They absorb the shocks that tire out the ready negotiation of capital transactions. They are a clearing house for the shifting ownership of world-wide industry and physical productivity.

So flourished the little group of original stock traders. As business and profits advanced there sprang up other groups of

security traders, and finally in 1865 the original New York Stock and Exchange Board combined with a number of its more recent satellites to move into its permanent headquarters under the name of the New York Stock Exchange. From that time to the present day this première stock trading organization of America has occupied its trading quarters at Broad and Wall Streets, New York City. From the original and modest building raised in 1865 almost constant growth of business has resulted in gradual increase of facilities. In 1903 the present main building was completed, with its façade, facing on Broad Street, representing one of the most widely recognized symbols of our modern financial world. Still expansion has proceeded in more recent years. In 1922 the new addition of 21 stories, extending along Wall Street to New Street, was opened. Plans for further expansion are indicated in recent acquisition by the Exchange of property extending farther south from Wall Street, along both Broad and New Streets.

The Continuous Market

During all this period of expansion in business and physical quarters, the facilities for speedier and more efficient trading have kept fair pace. From intermittent, or "call," trading before the Civil War, the process of constant trading, or "continuous market," has developed, whose normal function is free and ready execution of orders during the active session of the market.

One of the greatest and most modern advancements was made in 1892 through organization of a stock clearing department, to operate the Clearing House for delivery of stocks on balance between the various brokerage houses. Its technique will be discussed in a later chapter.¹

Whatever mystery lingers about the physical operation of the stock exchanges for the professional or layman, whatever explanations and descriptions are necessary, are almost entirely the result of the tremendous growth of business handled, demanding technical devices for increasing the speed, the volume

¹ See Chapter V.



Copyright N.Y.S.E.

PLATE 2. THE NEW YORK STOCK EXCHANGE BUILDING

Exterior view showing Wall Street, with Trinity Church at the Broadway end, on right, and Broad Street at left.

and the efficiency of trading. The most important of these devices will be discussed in the following chapter. For easy reference to the high points in such development, a chronology of the New York Stock Exchange will be found in Appendix A, on page 713.

Market Development Has Not Changed Fundamentals

In taking up a study of the physical apparatus and methods currently employed in stock exchange operations our old theory will still be useful. No matter how intricate the machinery or how technical the terms used in present day trading they will all be more readily understood if the reader will continue to remember our fundamental theorem — that stock market trading or operation is nothing more nor less than the specialized buying and selling of the instruments representing physical properties of a productive character.

The evolution of the stock certificate has merely made many times easier and quicker the transfer of ownership in such properties. In essence, the stock certificate is nothing more than a deed to property or other assets, a deed whose ready negotiability makes possible, as well as it results from, the organization of formal centers for stock market trading.

Modern Markets Merely Simplify

In the final analysis, all that our modern stock markets, with their intricate machinery, have done is to make more simple and more readily accomplished the purchase of property little different from the Appian villa which Tiberius Polonius purchased through personal agency 2,000 years ago.

The fundamental meaning of the tremendous spectacle and apparent confusion of hundreds of excited men on the floor of the New York Stock Exchange is that they are merely arriving at a fair price at which property shall be valued for transfer from one holder to another, through the medium of public and competitive bidding.

If no one wished to buy stock certificates, representing property ownership, or if no one wished to sell such certificates, there would be no need for stock exchanges. Indeed, there would be no stock exchanges. They are the answer to a constant demand for purchase and sale of such certificates at the best prices obtainable.

Fundamentally, therefore, a stock exchange is nothing but a public market, where people so desirous may buy or sell stock certificates of corporate ownership, just as the housewife and the farmer may buy and sell green vegetables at the community farm exchange.

The New York Stock Exchange as a Model

We are interested just now, however, in the technical aids with which such physical bargaining and trading are accomplished. In advancing to specific details it is still fitting that we consider the New York Stock Exchange in our detailed study, for it is by far the largest and best known such exchange in America and is a pattern for practically all other and smaller similar exchanges located throughout the country.

Let us look at the most impressive and most spectacular portion of this Exchange, then. Here is a huge indoor arena, consisting principally of open floor space where men who are duly qualified by membership gather each trading day to transact the purchase and sale of securities. Plenty of space is required for their activities because there are generally between 600 and 700 of such agents and it is their duty to ascertain from each other the best price at which they can execute their various orders.

Scattered evenly in this open space for trading are "posts" or centralized stations which serve as bases for the trading in certain individual issues. Each post is connected with the members' telephone booths by pneumatic tubes, the floor covering over 35 miles of such tubing. With over 2,700 separate issues of stocks and bonds listed on the New York Stock Exchange, and in which members are able to trade through stock exchange channels, the



Copyright N.Y.S.E

PLATE 3. FLOOR VIEW OF THE NEW YORK STOCK EXCHANGE

The trading "floor," showing new-style posts. Annunciator board between flags. Telephone booths around the side.

necessity is readily apparent for some measure of subdivision in the particular area where bargaining in individual issues can be most advantageously carried on. Most of these issues are "inactive," that is, they are not dealt in to any great volume and are therefore generally handled by specialists, who may make a specialty of trading in such individual issues.

Trading Posts

Previously there were 20 of the old-style "posts" on the "floor" of the Exchange but they accommodated less than 500 of the issues listed for trading. During most of 1928 the Exchange experimented with a new type of post, shaped like the letter "U" or in the form of a horseshoe. So successful were these tests that during 1929 the entire floor was re-equipped with this new type of post. There are now 12 of these horseshoe posts for stock trading but they accommodate about 1,300 stocks, or more than double the old volume.

Comparison of Plates 4 and 5 shows the relative change. The new posts are larger and more complicated but each one accommodates five times as many issues as did one of the old posts. They also provide desks, inside the horseshoe, for the specialists' clerks who are thus much closer to their active trader than previously. Such clerks are not allowed on the "floor" and were formerly at the telephone booths on the side but may now remain inside their new post without being technically on the "floor."

The new posts still have the pneumatic tube connections with the telephone booths of members' order clerks, but they also have telephone connections of their own by which the specialists' clerks keep in touch with their own houses and other portions of the floor. Since a large portion of trading is done through the specialist in any given stock, the greater proximity of the specialist's clerk in the new post has facilitated trading to a large degree, aside from the greater number of stocks accommodated and the other modernized accessories of the new type post.

Post number 1, for instance, has the symbols of over 100 individual active stocks displayed around its top. Around this particular post, therefore, gather the traders who are interested in buying or selling at any particular time a block of any one of those particular stocks. They go to that post because they know that there they will find the greatest number of other traders who are also interested in buying and selling the individual stocks listed for that section.

The "Floor"

On three sides of this mammoth and high-ceilinged room, called the "floor" of the Exchange, are ranged small stalls, compactly fitted with a total of nearly 2,000 telephones. These 'phones are for the convenience of the members. Through them they keep in touch with their offices, the stock brokerage houses, receiving from their houses the orders they are to execute, and sending back to them their reports of such executions.

On the fourth side of the floor are a small number of telephone stalls, the official rostrum and the call money and stock loan desk. On the wall over the rostrum and duplicated on the wall directly opposite are the two monstrous "call boards." They are for the purpose of calling the members to the 'phone when they are wanted by their outside offices. The boards consist chiefly of a great black background on which are constantly flashed changing white numerals. Each member has his own call number and when he is wanted at his private and direct 'phone his number appears on both of these annunciators, or signal boards. The trader must constantly cast a fleeting glance at the portion of either of the boards on which his number appears, so that when it does appear he will notice it quickly, complete what business he is then engaged in, and go to his 'phone booth to receive the call.

The other two walls, not occupied by the annunciators, are almost entirely glass. They are huge windows which make the use of artificial illumination seldom necessary. Between the windows and the top of the telephone booths on the floor are



Copyright N.Y.S.E.

PLATE 4. THE OLD-STYLE TRADING POST
Showing attendants, quotations and pneumatic tube station.

two opposite and narrow runways, known as the visitors' galleries. The one on the Broad Street side is more commonly used, while the one on the opposite, New Street, side is reserved for personal guests of the members.

Only active members of the Exchange, and necessary employees, are allowed on the floor of the Exchange during an active session. This rule is most rigidly enforced. The public in general is not even allowed in the visitors' galleries except upon application to the Secretary's office or by introduction from a member.

Visiting the Exchange

If one is a friend or a customer of a Stock Exchange member or a member house, a polite request to whomever of the firm one does business with will generally evoke a written pass for himself and his party to the visitors' galleries of the New York Exchange. With this pass the party enters the New York Stock Exchange building through what may appear to be a rear entrance. It is located on the Broad Street side of the building at the extreme end away from Wall Street and is reached by descending a short flight of three or four outside steps.

The visiting party enters through this corridor and takes the elevator on the right, asking for the visitors' galleries. On emerging from the elevator the pass is presented to the guard at the visitors' desk, and under ordinary circumstances the party is then ushered into one of the galleries, accompanied by a Stock Exchange guide, who explains the general set-up of the floor and is usually glad to answer any questions relating to mechanical methods of the Exchange's operation.

With regard to out-of-town visitors to the New York Stock Exchange, it is much more convenient, if not necessary, to arrange for one's visiting pass through his own brokerage house. Unless he deals by mail or wire, therefore, with a New York house, it is advisable to request such a pass from the local broker before embarking on the New York trip. Often the local broker will merely present a notation, which must in turn be presented to

the New York correspondent of the local broker before the pass can be secured, but this does not abrogate the advisability of getting the original notation from the local broker with whom stock market business is transacted.

Stock Exchange Members

Having become familiar with the general appearance of this great amphitheater of stock market action, the floor of the New York Stock Exchange, we are prepared to glance at the people who use it. We have previously referred to them as traders but they are all members of the New York Stock Exchange. Such members are the only persons allowed to engage in actual trading of securities on the Exchange.

There were, up until recently, only about 1,100 such members. With the rapid growth of listings and demand for trading facilities, due to public participation in the stock market, memberships on the Exchange grew scarce and the price of such membership advanced from less than \$100,000 in 1925 to high record quotations of over \$600,000. During 1929 provision was made for an addition to the membership of 275 more "seats," as they have been popularly called, and rights to a fourth of a new membership were given to each of the old members, with resultant decline in the price.

The total number of New York Stock Exchange members is now about 1,375, therefore. By no means are all of these members present at any one time for trading purposes on the floor of the Exchange, however. Such a number could not be easily accommodated in the present room space. Many of the members are inactive. Many more do not trade personally but give their orders to other members for execution, thereby saving themselves the actual mechanical activity of executing transactions and, through their memberships, saving themselves also the usual commission charges for traders who are not members.

The commonest story of the "rube" who passes through the visitors' galleries of the Exchange is his surprise at the lack of any apparent "seats" of which he has heard so much. The



Copyright N.Y.S.E.

PLATE 5. THE NEW-YORK TELEPHONE COMPANY'S
Side view showing specialists' order box and quotation boards

term is, of course, merely a remnant of past history, for there are no seats, as such, on the floor of the Exchange. And if there were, it is very doubtful if any of the members would have time to use them.

Stock Exchange "Seats"

Fact and fancy are generously intermingled with regard to the original derivation or development of "seats" as applied to the New York Stock Exchange. It seems most probable that the term was originally aptly applied to stock exchange membership, for in the early and more leisurely days of its history members of the Exchange sat about their trading quarters in chairs or seats and transacted their business or thus waited for it to appear.

In his enlightening history of the New York Stock Exchange, E. C. Stedman reports that the New York Stock and Exchange Board, on April 8, 1817, resolved: ¹ "that we pay Mr. George F. Vaupell for the use of his front room in the second story of house No. 40 Wall Street, two hundred dollars (\$200) per annum, he to furnish fire and chairs, when required, and to keep the room in order."

We have previously referred to the present membership of about 1,375 "seats" of the New York Stock Exchange, stating that by no means all of the members are active traders on the floor at any one time. We are indebted to J. Edward Meeker, Economist of the Exchange, for one of our best explanations of the various classifications into which the Exchange members fall, in his splendid and complete volume, "The Work of the Stock Exchange."²

There are two main classes of such Exchange members: first, the brokers, and, secondly, the dealers and traders. By far the majority are brokers, who execute orders for their firms and individuals on a commission basis.

The dealer, or trader, on the other hand, trades only "on his

¹ Stedman, E. C. (Editor), "The New York Stock Exchange," p. 65.

² Meeker, J. Edward, "The Work of the Stock Exchange," p. 44.

own account." He is his own master, trades only when and how he feels so inclined and does not execute orders for anyone but himself.

Types of Broker

The broker partakes of a number of different subhead types, the most numerous and important being the commission broker who represents his own brokerage house on the floor of the Exchange. There is also the free-lance who executes business for the various brokerage houses as an additional instrument when their orders become too heavy for their own commission broker to handle alone. The free-lance is usually known as "two-dollar broker," since his commission from the brokerage house used to be two dollars per hundred shares. His rates have gone ahead in the general march of increased commissions but he still goes by his old name of the two-dollar broker.

Subheadings under the dealer and trader include the odd-lot dealer, the specialist and the floor trader. The odd-lot dealer specializes only in blocks of less than 100 shares, the usual unit of trading being 100 shares or more. He is in business entirely for himself or his firm, but he executes orders from the commission houses at a stated price differential based on full-lot sales, since the odd-lot business is so intricate and specialized that the large commission houses prefer to turn such business over to the odd-lot dealer and confine their own trading to the regular unit of 100 shares or more.

Then there is the specialist who partakes somewhat of the character of the floor trader but is distinguished because he specializes in one particular stock or stocks. He is his own boss but receives commission business from the commission houses who recognize his superior ability at execution of orders in his special stocks.

Finally, there is the floor trader who is the aristocrat of the fraternity. He knows no master, does not execute any business for anyone else, even at a commission charge, and merely trades for his own account. It is he who stabilizes market movement on

the floor of the Exchange in large measure by taking advantage of small fractional movements in price and being satisfied with fractional profits. The fact that he is a member of the Exchange and need pay no commissions on his transactions reduces his overhead to such a degree that an eighth-point profit is generally a good enough margin to accept on quick transactions.

The Commission Broker

As we have previously noted, however, the largest and the most important class of traders is the commission broker. It is this class who transact most of the business done on the Exchange and who execute most of the orders received by the stock brokerage and commission houses. The latter generally furnish the capital for the brokers' seats but they must be registered in his own name and are technically his own property. Most of these brokers are old and trusted members, or partners, of the commission firms which they serve. Theirs is the great responsibility of seeing that all the firms' orders are executed quickly and at the most advantageous prices possible.

They are a specialized fraternity about whose habits and personal qualities a separate volume might be written. They are not the names commonly associated with big dealings on the New York Stock Exchange, for comparatively few of them actually trade for their own account. Most of them are simply agents who execute buying and selling orders for their firms and individuals on a commission basis.

They might be termed the unsung heroes of Wall Street. The commission broker has a job that calls for the keenest of minds, the quickest of actions and the strongest of physical constitutions. No one who has not witnessed a hectic day's trading on the floor of the New York Stock Exchange can have any conception of the mental and physical strain often imposed upon these traders.

The hours of actual trading are from ten o'clock in the morning until three in the afternoon on week days and from ten o'clock until noon on Saturdays. The periods are often referred to as

"bankers' hours," but in even normal trading the floor man transacts more business and uses up more energy in that short interval than the average business man expends in a couple of days of "hard work."

Private Life of the Broker

The men who transact this actual business on the floor of the Exchange must live their entire life with merely that end in view. They can have no outside interests of a business nature which might in any way interfere with their efficiency on the floor of the Exchange. They can have no social engagements or contacts that might in any way, physically or mentally, impair their keenness for the five-hour grind of the following day.

The result is that most of them become one-track men with one-track minds. They must have their regular exercise to keep fit, and they get it chiefly through the great American game of golf. They are usually quiet men, outside of their professional arena. They must be, to conserve their strength for the morrow. They may partake of social interludes early in the evening, but all but the exceptional constitution must be in bed at a reasonable hour, to insure a good night's sleep, an early awakening and a keen mind and a strong body to go through the maelstrom of the next day's trading.

The commission broker must always have strength in reserve. For he knows not the day nor the hour when normal trading will suddenly give way to heavy and excited trading. Often enough in normal trading, he goes with hardly a thing to eat or drink from gong to gong. But when heavy buying or heavy selling occurs, when seconds mean millions to his clients, when quick execution is at a premium, then comes the real test of the professional floor trader.

The public has stood aghast more than once in the past few years at the heavy total 10,000,000 and 12,000,000 share days compared with an average of 4,000,000 shares per day. They have marvelled that the old-style stock ticker could make its way through the volume of certain days and be only an hour

behind the market. But they have seldom stopped to think of the terrific strain of such an increase in business volume on the "poor devils" on the floor of the Exchange. Most of them are exceptionally well paid, but they earn all they get even in normal trading.

CHAPTER III

BROKERAGE HOUSES AND TRADING FACILITIES

The Rise of the Brokerage House

We now have a pretty good idea of the physical facilities for operation on the floor of the New York Stock Exchange. But before we can understandingly "put through" a bona fide and complete transaction we must pause to consider more closely the brokerage or commission houses through which most of the orders to be executed on the Exchange originate.

New York City has always been the chief center of stock market trading in this country. It is likely that it always will be, but within the past decade not only have New York brokerage houses expanded by establishing branch offices throughout the entire country, but independent firms have set up their own business in other cities and then purchased memberships on the New York Stock Exchange for transaction of their own local commission business. A list of member firms of the New York Stock Exchange will be found in Appendix B, on page 718.¹

Likewise, whereas twenty years ago there were not more than perhaps a dozen separate and duly organized stock exchanges in the United States, their number has grown rapidly until today nearly every large city in the country has its own local stock exchange, be it large or small. By far the majority are protected by fairly rigid rules of listing, by rules for their members, etc., and are on a generally high plane. The New York Stock Exchange has set the pace in its very rigid rules and regulations and the Associated Stock Exchanges have also done much to foster standardization of the various markets throughout the country on a high basis of safety and security for the stock buying public.

¹ See also Chapter XIII, p. 298.

We shall pay closer attention in a later chapter ¹ to these outside exchanges. A detailed list of the member firms of some of these other markets may also be found in Appendix C, on page 754.

Branch Brokerage Offices

Besides these independent stock markets in various cities of the country, the New York Stock Exchange alone lists nearly 150 offices of registered out-of-town members, and shows a total of around 1,000 branch offices scattered throughout the country of member brokerage houses whose main offices are located in New York.²

Little wonder then with such improved and widespread facilities for trading, that sales on the New York Stock Exchange have advanced from an average daily trading of under 1,000,000 shares in 1924 to the average daily trading volume for 1929 of well over 4,000,000 shares per day.

Today the entire nation is linked together by stronger bonds than man ever knew in previous eras of the world's history. They are bonds of speedy communication and they extend into the tiniest hamlet and to the most remote farmhouse.

Quick Communication Fosters Trading

Every such artery of communication is a potential feeder of trading on our national stock exchanges. Almost countless direct and private telegraph wires emanate from the New York Stock Exchange member houses, spreading their tentacles across nearly every state of the Union and making it almost as easy and simple and rapid a process to buy and sell stock on the New York markets from San Francisco as if the trader were sitting in the office of a New York brokerage concern.

The writer knows personally of one trader who owns a ranch far in the so-called wilderness of one of our Western states. He is

¹ See Chapter XIII.

² See Appendix B for complete list of N. Y. S. E. member firms.

an inveterate stock market trader and does not spend a great deal of time in his secluded country estate. But when he is there he is able to keep just about as closely in touch with the markets as if he were personally in New York. His ranch home is many miles from the railroad, over tortuous and unimproved roads. But his radio brings him the closing quotations of the day's market after dinner in the evening and the next morning he telephones his orders to his broker in a near-by city over long-distance wire. His broker, in turn, telegraphs such orders, along with those of other customers as they are received, to his New York correspondent, and within a very few minutes the man who is physically marooned on a lonely ranch, 3,000 miles from Wall Street, has had his market transactions completed just as satisfactorily as if he were in New York City.

Small wonder then that the volume of trading on our stock exchanges has increased by leaps and bounds. Small wonder that the public has been more interested in market trading than ever before. Small wonder that stock exchange houses are establishing new and farther-flung branches throughout the country. And small wonder that New York should still retain its première market position despite the westward spreading of riches, population, wealth and stock market operation.

Types of Brokerage House

There are many different types of brokerage house who are members of the New York Stock Exchange. No specific classification can be made which will fit them all. Probably the largest number are comparatively small houses, with only two or three partners, doing more of a personal business for themselves than for the public. Then there are also many small houses who depend for their commissions on the patronage of perhaps only two or three large operators who prefer to do their business in such small houses because they have better personal supervision, privacy and personal attention than might be the case in a large house with a great number of diverse clients.

Corporations are not allowed to hold seats on the New York Stock Exchange. All brokerage houses are partnerships. The larger houses have perhaps a dozen or more seats, 15 to 20 partners, and thousands of individual accounts for their clientele. The larger houses may be subdivided according as they solicit large accounts or small accounts and according as they specialize in local accounts or in business which originates out of town. The latter are called "wire houses." They have branch offices and correspondents scattered in large cities throughout the entire country, abroad and even on transatlantic steamships. Other large New York houses have their central offices in the Wall Street district but also maintain numerous branch offices in up-town New York and in the suburbs for the accommodation of a scattered clientele.

Then there are the registered out-of-town members of the New York Stock Exchange.¹ These are firms, generally quite large ones, which have no central offices in New York but have their main offices in other cities. They are admitted to membership in the New York Stock Exchange as registered out-of-town houses, have approximately the same rights and privileges as the New York members, are governed by the same rules and are in just as high standing as their New York brothers.

All Strictly Supervised

Varied as are the clientele and ambitions of the stock exchange fraternity, all member houses are regulated by the same rules and, in large measure, all are governed by the same principles of utilitarian procedure in the conduct of their business. The result is that the conduct and appearance of practically all large and reputable brokerage houses is the same. The scale of grandeur varies greatly, of course, but usually the rudiments do not.

The most ostentatious room, the most important one for the public and for the client's good-will, is, of course, the customers' room. Here are long rows of chairs ranged to face one wall over

¹ See Appendix B.

which is spread the stock board. On this board appear as many of the popular stock market trading favorites as space will allow. Each individual stock issue has its own column. Represented usually are the dividend rate, the high and low prices for this and perhaps for last year, yesterday's high and low and today's opening, high, low and last prices. Some of the older houses still use chalk to mark up these prices. The majority have a special board with prepared slots into which the "board boys" are constantly slipping cards with the latest prices so that the numerical picture for each stock "boarded" is always as close to the market as the physical facilities of the stock exchange and the brokerage office can make it.

Many of the larger houses are now installing the new automatic stock boards which do away entirely with manual labor of the board boys. The board is operated electrically from a central station control board and price changes are recorded from the central station on all the individual boards on the circuit at the same time. The new invention promises to revolutionize this particular portion of market presentation. The automatic boards are more complete, more accurate, much faster and in all ways superior to the old method of posting prices by hand and it seems only a question of time until their installation shall become general.

Appearance of the Brokerage Office

Usually on the opposite side of the customers' room from the board are located the firm's public office windows. There is at least one important window for the reception of customers' written orders for the execution of trades. Often the cashier's window also fronts on the customers' room. Behind these are the inner workings of the brokerage house office force, the order clerks, wire clerks, who receive orders from branch offices and correspondents, the margin clerks, the executive offices, the accounting and bookkeeping departments and quite probably a statistical department.

Outside in the customers' room, the customers, or "room

traders," as they are often called, are ranged about in the chairs, or standing, watching the changing quotations on the stock board. There are usually at least one stock ticker and one bond ticker located at the edge of the room for the personal use of customers, though most large brokerage houses also have the Trans-Lux, or movie ticker, in one corner, where the stock ticker tape itself is magnified and projected on a screen so that the tape passes in review much as a motion picture on a large screen and customers need no longer cluster about the stock ticker itself.

The Customers' Man

During the trading sessions, the "salespeople" or customers' men are constantly in attendance, flitting casually about among the customers, not soliciting orders but always ready to take them, give advice or merely talk about the general market. These men are the contact points between the brokerage house and its customers. They cement good-will by injecting the personal touch. A customer need not give his orders through any single one of these customers' men. He may give it personally at the order window, telephone it, wire it or mail it. But generally, each customer has his own customers' man with whom he is especially acquainted, who is always ready to put himself out for the customer's convenience and through whom the customer generally gives all of his orders.

Here are all of the instruments for trading in the stock market. But before one can make use of such instruments and engage in actual trading with such a brokerage house he must open an account with the firm. The man in the street cannot casually walk into any commission house office he happens to see and order the purchase or sale of stock. The broker must have not merely the assurance that his customer can and will pay for his stock and the commission for executing orders in the market — he goes further than that. Much further, in fact, for generally the customer must already have on deposit sufficient cash or acceptable collateral security to carry the stock which he orders purchased or the equity to protect a sale.

Opening a Brokerage Account

Before the individual may avail himself of the privileges and intricate mechanism set up for his potential convenience in stock trading, therefore, he must open an account with a brokerage concern. This procedure is rather similar to opening a bank account. The individual is usually introduced by a mutual acquaintance, though in the case of firms soliciting commission business by wire or mail this is of course impossible. Credentials and references are then exchanged, however, on both sides.

The prospective customer is given a card on which he writes his name, address, business and other details, and also a specimen of his full signature as it will appear on future communications and orders for execution. Generally, also, the brokerage house will require the customer's signature to a code of rules, or an agreement, affecting the contract between broker and customer, dealing with margins, hypothecation of securities, margin calls, liability, etc. Such agreements are usually made out according to firm rulings of the New York Stock Exchange and may be signed without legal counsel, fear or trembling (See Plate 6).

Depositing Brokerage House Credit

The customer then deposits with his broker whatever amount of credit he wishes to open his account with, in cash or in negotiable securities, which are acceptable to the broker as collateral. This deposit establishes the customer's first entry on the books of the brokerage house. It is in the form of a credit balance and he is now qualified to trade through this brokerage house to the extent allowed by the equity in his account. The customer may deposit or withdraw funds or securities from his brokerage account, generally on demand, any time he so desires, provided that such withdrawal will not jeopardize the equity which his broker demands in his account to carry stocks purchased on margin or short positions.

Having opened his account with the brokerage house, the

59510-2M

Name (in full) George Samuel AngellCommunications to be sent to R. F. H. # 3, Los Angeles, Cal.Business or Occupation Illustrator
(Please give name of firm or corporation and position held)Telephone number Main 0000Introduced by John Doe

LELAND & COMPANY

I desire to arrange with you to act as brokers for me in the purchase and sale of securities and/or property from time to time. In view of the fact that I may not at all times when I give orders wish to pay in full for securities and/or property which you may purchase for me, or immediately to deliver certificates for the securities and/or property which you may sell for me, I request the assistance of your credit in making payments for purchases and in the delivery of securities and/or property which I order sold; and to that end I desire to open a credit account with you.

In consideration of your undertaking these proposed transactions and opening the account in which they will be recorded, I agree as follows:

All transactions are subject to the rules, regulations and customs of the Exchange or Market (and its Clearing House, if any) where executed by you or your agents:

Whenever I am indebted to you, and/or whenever you have entered into any open commitment for me, and/or whenever I have a short position with you, all securities, and/or property, and/or contracts for or in relation to commodities now or hereafter held by you, or carried by you in any account for me (either individually or jointly with others), or deposited to secure same, may, from time to time and without notice to me, be carried in your general loans and may be pledged, re-pledged, hypothecated or re-hypothecated or loaned by you either to yourselves as brokers, or to others, separately or in common with other securities and/or property for the sum due to you thereon or for a greater sum and without retaining in your possession or control for delivery a like amount of similar securities;

Whenever you shall deem it necessary for your protection to sell any or all of the securities or other property which may be in your possession, or which you may be carrying for me (either individually or jointly with others), or to buy in any securities, commodities or contracts for commodities, of which my account or accounts may be short, in order to close out my account or accounts in part or in whole, or in order to close out any commitment made in my behalf, such sale or purchase may be made according to your judgment and may be made at your discretion on the exchange or other market where such business is then usually transacted, or at public auction or private sale, without advertising the same and without notice to me and without prior tender, demand or call of any kind upon me,—it being understood that a prior tender, demand or call, or prior notice of the time and place of such sale or purchase, shall not be considered a waiver of your right to sell or buy any securities and/or other property held by you, or owed you by me, at any time as hereinbefore provided.

In case of the sale of any security or property by you at my direction and your inability to deliver the same to the purchaser by reason of my failure to supply you therewith, then and in such event, I authorize you to borrow any security or property necessary to make delivery thereof, and I hereby agree to be responsible for any loss which you may sustain thereby, or by reason of any loss you may sustain by your inability to borrow the security or property sold.

This agreement shall continue with your firm, or successor firm until revoked by me in writing and all my open accounts and/or contracts for my account have been closed. This agreement and its enforcement shall be governed by the Laws of the State of New York.

Dated January 22, 1929George Samuel Angell

PLATE 6. CUSTOMER'S AGREEMENT WITH BROKER

One of the most common forms of contract, often called a "Consent Form," to protect broker. Other card forms call for more detailed information on introduction, signature, type of account, etc.

customer may begin his market trading activities at any time. But before doing so he should be familiar with the stocks from which he may make his trading selections as well as with the various methods of giving orders for market execution.

The Price Factor in Trading

Remembering all the time that by trading in stocks we are only trading in the insignia which represent physical property of a producing nature, it will be clear that the trader must consider more than the caliber of the property he buys. He must also consider the price which he must pay for it, or which he is willing to pay for it. Our old friend, Tiberius Polonius, decided he wanted to buy his Appian villa but before doing so he decided in his own mind what the villa was worth to him — how much he was willing to pay for it. If he could get it at what he considered a fair price he would complete the purchase. Otherwise, he would wait for such time as the price should come down to his figure or his figure should advance to meet the price asked. Or, more probably, he hunted around until he found another villa which would suit his purpose just as well and was for sale at what he considered a fair price.

So in modern stock market trading the prices at which stocks are bid or offered for purchase and sale are highly important factors. We shall see in the next chapter how such values and prices are determined, but for the moment we need merely realize that a stock is not always a good purchase simply because the property which it represents is comparatively valuable. Such fact being granted, the stock may already be selling much higher than a just valuation of the property which it represents would warrant, and in such case, of course, the stock would not be a satisfactory purchase.

Price is an all-important consideration, therefore, for the stock market trader. It is quite as important a factor as, and perhaps more so than, the actual stock or property which he selects for trading purposes — because, theoretically at least, the worst kind of property may be a good buy if it is offered at a sufficiently low

price and, conversely, the best kind of property, or stock, may be a poor buy if it is already selling too high.

Selecting the Stock

Nevertheless, the customer must decide not merely the price he wishes to pay but must also, by comparing such prices and the values that they represent, decide what property to trade in — what stock to buy, or sell. As of January 1, 1930, the New York Stock Exchange had listed 1,543 different issues of bonds, and 1,293 individual stock issues. With new stock issues since listed, the potential stock trader may make his selection from a total of over 1,300 individual issues, covering practically every type of stock, business and industry of the nation.

Knowing the stock he wants to buy and the price at which he is willing to buy, the new customer compares that price with the price for which the stock is actually selling on the floor of the Exchange. By means of the stock ticker, which will be described more fully later on,¹ the prices actually ruling on the floor of the Exchange are constantly reprinted on a narrow strip of paper issuing simultaneously from stock tickers located in brokerage houses throughout the entire country. The customer of a brokerage house in San Francisco gets his report of sales and prices made on the floor of the New York Stock Exchange by relay telegraph ticker service almost as soon as the customer in a New York commission office.

Stock Symbols

Unfortunately for the novice, however, speed has required that the stocks of individual companies listed on the market be represented by symbols instead of the full name of the corporation being written out on the stock tape. The old-fashioned tickers can print only a limited number of letters and figures per hour and since it is necessary for the ticker to report all sales made on the floor each hour, the ticker service is given a much greater

¹ See Chapter IV, page 71.

capacity of recorded sales by printing symbols, somewhat similar to radio station call letters, in place of the full name of the corporation whose stock is represented by such symbol.

Some symbols are suggestive and require no great strain of the imagination to decipher. The symbol PA, for instance, stands for Pennsylvania Railroad Company stock, while ATT represents American Telephone & Telegraph stock which is commonly referred to as "A.T.&T." or "Tel. and Tel." Again, BMT stands for stock of the Brooklyn-Manhattan Transit Corporation, and this stock also, as well as the New York subway system which it operates, is quite commonly known to the man in the street as the "B.M.T."

Getting Acquainted with Symbols

There are many such symbols which are sufficiently suggestive to give a clue to the stocks represented. But the great majority of such symbols must be learned by the customer. It is not a process of applied study, however. It is more the gradual acquaintanceship with an ever-widening number of stocks and their association with the representative symbols. The customer need not know all symbols. Even the most ardent ticker watchers seldom know all the symbols which appear on the tape. They are frequently changed and there are also frequent additions to the list as new issues are admitted for trading. The customer will almost always learn and remember the symbol for any particular stock which he is trading or interested in, and gradually he will find that his ability to interpret individual symbols is expanding with his interest in the market. Gradually, too, then, the ticker tape assumes a larger and larger meaning, compared with the unintelligible mass of jumbled figures and hieroglyphics which it represents to the uninitiated novice.

In Appendix D, on page 788, are listed the ticker symbols for all stocks listed on the New York Stock Exchange, one list with stocks, the other with symbols, arranged alphabetically.

It is not, of course, absolutely necessary for the stock market trader to be familiar with such symbols. When actually trans-

mitting orders it is more customary to write out the full name of the stock, rather than to depend merely upon the nicknames or ticker symbols. Such knowledge is necessary, however, if the customer wishes to get much information either from the stock market ticker record, or even from the stock board in any commission office, since the symbols are used on the stock board to designate the various boarded issues whose prices are recorded from the tape.

Nicknames of Active Stocks

We have referred to the nicknames for various stock issues. This habit of giving nicknames has grown out of a desire to save the time necessary for repeating the full name of a corporation when its stock is mentioned. It does not save as much time as the ticker symbol method but the nicknames are generally more expressive than the symbols.

We have already mentioned "B.M.T." as the nickname, as well as the stock symbol, BMT, for Brooklyn-Manhattan Transit Corporation, and "A.T.&T." as the nickname for American Telephone & Telegraph Company. Many such nicknames are derived from the ticker symbols, as these two are. Other such examples are the nickname "I.T.&T." for International Telephone & Telegraph Company, derived from its ticker symbol, ITT, and the nickname "Katy," for Missouri-Kansas-Texas Railroad Company, derived from its ticker symbol, KT.

Most of such nicknames, however, have nothing to do with the ticker symbols. On the other hand, most of them are sufficiently suggestive, or sufficiently familiar outside of stock exchange parlance, so that their meanings are readily apparent. Atchison, or "Atch," for instance, stands for Atchison, Topeka & Santa Fe Railroad Company; Central stands for New York Central Railroad Company; Lackawanna stands for Delaware, Lackawanna & Western Railroad Company; Steel stands for United States Steel Corporation, and so on.

On the following page are listed some of the more popular and active stocks and a few of their favorite nicknames.

<i>Stock</i>	<i>Nickname</i>
American Can	Can
American Locomotive	Loco
American Smelting & Refining	Smelters
American Sugar Refining	Sugar
Anaconda Copper	Copper
Armour of Illinois (Class A)	Packing
Atlantic Coast Line	Coast Line; or A-C-L
Bethlehem Steel	Bessie
Chicago, Milwaukee, St. Paul & Pacific	St. Paul
Colorado Fuel & Iron	Fuel
Consolidated Gas of New York	Con Gas
Delaware, Lackawanna & Western ..	Lackawanna
General Electric	G-E
General Motors	Motors
Interborough Rapid Transit	I-R-T; Subway; or Crush
International Combustion Engineering	Combustion
International Nickel of Canada	Nickel
Missouri Pacific	Mop
Montgomery Ward	Monkey Ward; or Monkey
New York, Chicago & St. Louis	Nickel Plate
Pan-American Petroleum	Pan Pete
Paramount-Famous-Lasky	Famous Players; or Movies
St. Louis-San Francisco	Frisco
Southern Pacific	Sopack
Standard Oil of New Jersey	Standard of Jersey; or Jersey
	Standard ¹
Studebaker Corporation	Stude; or Studie
U. S. Realty & Improvement	Realty
U. S. Steel	Steel

Reporting Sales

We have previously stated that the usual unit of trading on the New York Stock Exchange (as well as on most other exchanges) is 100 shares. For this reason the stock ticker, in reporting the volume of each sale, omits such volume when it is that unit of 100 shares which is being reported. Sales of less than 100 shares are not regularly reported, since they are generally executed by the odd-lot specialist ² and only appear on the tape indirectly when the odd-lot trader can no longer "clear" his balance of purchases and sales in one stock, and must enter the regular market to balance his position by the purchase or sale of a full 100-share lot.

¹ And similarly for other Standard Oil Company stocks.

² See Chapter X.

Sales of more than 100 shares are, in normal trading, printed on the stock exchange ticker merely in multiples of the 100-share unit. For instance, a sale of 700 shares appears on the ticker only as the figure 7, before the price of the sale, while a sale of 12,000 shares of a stock would appear merely as the figure 120, before the price at which the sale was made.

The Stock Tape

Letters are printed on the top line of the ticker tape and figures on the lower line. A sale of 900 shares of common stock of United States Steel Corporation would therefore appear on the tape as an X on the top line, followed by $9.181\frac{3}{4}$ on the lower line. During very active markets, when the stock ticker is having hard work in keeping up with actual transactions on the floor of the Exchange, it has been customary to omit all numerals which are not absolutely necessary. Since prices of transactions seldom vary more than from a fraction to a couple of points, this sale might appear merely as "X $9.81\frac{3}{4}$," or even as " $9.1\frac{3}{4}$." During active trading days in recent years actual volume has been omitted during most of the day, but when the new high speed tickers go into operation it is hoped that volume of sales can again be printed regularly. Plate 7 shows a portion of the tape reporting prices but omitting volume of sales.

The customer is now familiar with the elements necessary for an intelligent reading of the physical market reports, as they are printed on the stock tape and as the latest price at which a sale has been made is posted under the proper stock on the stock board in his commission house office. We have previously stated that he must consider two chief things in originating a trade: first, the stock he wishes to trade in; second, the price at which he wishes to trade.

Transmitting the Order

We shall study in a later chapter ¹ the methods of analysis which the individual may use in deciding which stock he wishes

¹ See Chapter XVI.

WX	KK	ATT	ENX	GL. NEW	HMT	X	MOP	P	ELB	U	AL	CV	SG
4 $\frac{3}{4}$	5 $\frac{1}{2}$	1 $\frac{7}{8}$	5 $\frac{3}{4}$		5 $\frac{1}{4}$	7	8 $\frac{7}{8}$	2	8 $\frac{1}{4}$	5	4	9 $\frac{1}{4}$	16

BS	V	CW		J	BO	RX	CG	OST	MZ	UNC
100 $\frac{3}{8}$	12 $\frac{7}{8}$	14 $\frac{7}{8}$	15	4	17	17 $\frac{1}{4}$	1 $\frac{1}{4}$	4 $\frac{1}{2}$	145 $\frac{3}{4}$	4 $\frac{5}{8}$

K	X	JKS	GD. NEW	NA	MOP	P	AWW	DD	SLD	G	PA
5 $\frac{1}{2}$	8 $\frac{7}{8}$	3 $\frac{7}{8}$	5 $\frac{1}{2}$	5 $\frac{1}{4}$	1 $\frac{1}{4}$	8	2	8 $\frac{3}{4}$	3 $\frac{1}{2}$	117 $\frac{7}{8}$	7 $\frac{3}{8}$ 8 $\frac{3}{4}$

J	BO	PLT	RXP	XA	COG	B	GIL	BS	PSS	AC		
4 $\frac{1}{2}$	17 $\frac{3}{8}$	3 $\frac{1}{8}$	3	9 $\frac{3}{4}$	16 $\frac{3}{4}$	3	4 $\frac{1}{4}$	100 $\frac{7}{8}$	7 $\frac{3}{8}$	8	7 $\frac{3}{8}$	8

GL	NA	GL. NEW	U	IN	X	KRT	RX	XA	RD									
60.	1	8	5	1	4	7	8 $\frac{3}{8}$	9.	8 $\frac{3}{4}$	9.	1	8.	7 $\frac{3}{8}$	17 $\frac{3}{8}$	90.	1	2	3

PLATE 7. A SECTION OF THE TICKER TAPE WITH TRANSLATION

First Line — Westinghouse Electric & Manufacturing at 154 $\frac{3}{4}$; Kelly Springfield Tire at 5 $\frac{1}{2}$; American Telephone & Telegraph at 221 $\frac{7}{8}$; Eaton Axle & Spring at 35 $\frac{3}{4}$; General Electric new at 65 $\frac{1}{4}$; Hudson Motors at 57; U. S. Steel at 178 $\frac{3}{8}$; Missouri Pacific common at 92; Missouri Pacific preferred at 138 $\frac{3}{4}$; Electric Boat at 5; United Corporation at 34; American International at 39 $\frac{1}{4}$; Commercial Solvents at 29 $\frac{1}{4}$; Standard Gas & Electric at 116.

Second Line — Bethlehem Steel at 100 $\frac{7}{8}$, and then at 100 $\frac{3}{4}$; New Haven at 112 $\frac{7}{8}$; Commonwealth & Southern at 14 $\frac{7}{8}$, and then at 15, then at 14 $\frac{7}{8}$, and finally at 15; Standard Oil of N. J. at 64; Baltimore & Ohio at 117; Advance-Rumely at 17 $\frac{1}{4}$; Columbia Gas & Electric at 81 $\frac{1}{4}$; Otis Steel at 34 $\frac{1}{2}$; R. H. Macy at 145 $\frac{3}{4}$; and Union Carbide and Carbon at 84 $\frac{5}{8}$.

Third Line — Chrysler Motors at 35 $\frac{1}{2}$; U. S. Steel at 178 $\frac{3}{8}$, then at 178 $\frac{3}{4}$ and again at 178 $\frac{7}{8}$; Julius Kayser at 35 $\frac{1}{2}$; General Electric new stock at 65 $\frac{1}{4}$, then at 65 $\frac{1}{8}$, and back to 65 $\frac{1}{4}$; North American at 98; Missouri Pacific common at 92, preferred at 138 $\frac{3}{4}$; American Water Works & Electric at 93 $\frac{1}{2}$; Du Pont de Nemours sold (earlier) at 117 $\frac{7}{8}$; Consolidated Gas of N. Y. at 107 $\frac{7}{8}$; Pennsylvania R. R. at 78 $\frac{3}{4}$.

Fourth Line — Standard Oil of N. J. at 64 $\frac{1}{4}$; Baltimore & Ohio at 117 $\frac{7}{8}$; Pacific Lighting at 83 $\frac{1}{8}$, and then at 83 flat; Advance-Rumely preferred at 33; Crucible Steel at 89 $\frac{3}{4}$; Congoleum-Nairn at 16 $\frac{3}{4}$; Baldwin Locomotive at 33; Gillette Safety Razor at 104 $\frac{1}{4}$; Bethlehem Steel at 100 $\frac{7}{8}$; Peerless Motors at 7 $\frac{7}{8}$, and then at 8; American Can at 127 $\frac{3}{4}$; then at 127 $\frac{7}{8}$, and finally at 128.

Fifth Line — General Electric at 260, then 260 $\frac{1}{4}$; North American at 98 flat; General Electric new at 65 $\frac{1}{8}$, then at 65 $\frac{1}{4}$; United Corporation at 34; International Combustion Engineering at 7; U. S. Steel at 178 $\frac{3}{4}$, then at 178 $\frac{7}{8}$, then at 179, then back to 178 $\frac{3}{4}$, again at 179, and finally at 179 $\frac{1}{8}$; Kreuger & Toll at 27 $\frac{7}{8}$; Advance-Rumely at 17 $\frac{3}{8}$; Crucible Steel at 90, and then at 90 $\frac{1}{2}$; and, finally, Royal Dutch at 53.

Trading of Saturday, January 25, 1930, reported without volume.

to buy or sell. For the moment we may assume that he has made this first decision. Through his familiarity with the stock ticker and the methods of price reporting he is also in a position to judge the second necessary point, whether the price of the stock in question is at a fair level. Having considered these points and decided to act the customer is ready to give his order and make his trade.

If he is not personally in his broker's office he may transmit his order, either orally or in writing, by any means that will get it to his broker. If he gives the order orally it may be by telephone or even by shouting across an areaway. If he gives it in writing it may be by letter, messenger, telegraph, wireless or what have you — so long as the medium of communication is sure to reach the office of his broker.

If the customer is personally present in his broker's office then giving the order is even more simplified. He may give it orally, direct to his broker or he may write out his order on the pads furnished for such purpose and himself hand it through the window of the order desk facing on the customers' room. The latter course is the most usual.

Order Pads

On a table or shelf just outside the order clerk's window he will find several "order pads" for the use of customers. The two most important ones are the "BUY" pads and the "SELL" pads. The former are usually printed in black, the latter in red. They generally have, beside this single word, and above it, the name of the firm. Illustrations of such pads, or order slips, are shown in Plates 8 and 9.

Especially in excited trading, brokerage houses have found that in isolated instances the customer will snatch for the wrong pad and sell when he intends to buy, or vice versa. Though such instances are probably few, they are expensive when they occur, and though the error is the fault only of the customer, such mistakes have led to some houses doing away with the two different types of pads. Such houses then furnish only one type

of order pad and make the customer write out either the word "buy" or "sell," thus making certain that no confusion may occur.

Usually there are also some other pads on this order desk, including perhaps one for requesting a quotation on a stock which has not sold for quite a while and has therefore not appeared on the stock tape. This slip has "QUOTE" printed at the top of it and is a request for the latest bid and asked prices for the stock

FORM 8

LELAND & CO.
BUY LOS ANGELES CAL. *April 20* 19*29*

100 American Can
@ market

George H. Angell

KEEP THIS ORDER GOOD UNTIL _____

PLATE 8. BUY FORM WITH ORDER

FORM 9

MIAMI BROS.
SELL MIAMI, FLA. *April 20* 19*29*

100 American Can
@ 139 1/4

G. J. C.
John Lee Mills

KEEP THIS ORDER GOOD UNTIL _____

PLATE 9. SELL FORM WITH ORDER

In Plate 8, Mr. Angell orders his broker to buy 100 American Can Common stock at the market, or a "market order." In Plate 9, he orders the same stock sold at a limited price, or a "limit order." In both cases he has filled out the broker's regular forms.

which the customer enters on the slip. Since there is theoretically a constant market on the floor of the New York Stock Exchange some broker has a bid price for that stock, in other words, is willing to buy it at a certain price; another broker has an asked price for the same stock, in other words, is willing to sell that stock at a certain price. The latter asked price is, of course, higher than the bid price. If the bid and asked prices were exactly the same the trade would be made and the sale be reported on the ticker. The fact that no such sales have appeared for some time indicates that the market for that particular stock is not very active, that there is a "spread" between the bid and asked prices, that the seller will not take less, nor the buyer pay more, and that the potential sale, therefore, cannot take place.

The customer may be willing to pay the asked price or sell at

the bid price, but he may desire first to find out what those prices are before he actually enters his order. He writes the name of the stock on one of the "QUOTE" slips, passes it through the order window or the quotation window, if the house has a separate office for such inquiries, and within a few minutes he receives the report on the bid and asked prices directly from the floor of the Exchange.¹

Another pad may have "CANCEL" printed at the top of the slips. These are for more convenient use of the customers in cancelling any orders which they have previously placed but are no longer desirous of having filled.²

Ways of Giving an Order

We are most interested, however, in the "BUY" and "SELL" order slips. Orders may be given for execution in various ways. Suppose the customer wishes to buy 100 shares of American Can at 139, considering it a good purchase at that price. If the stock is selling at just about that price and he wants to be sure of buying it at once he puts in a "market" order. He orders the stock purchased "at the market." This means that his broker must buy the stock for him, provided of course that he has sufficient margin, immediately. He cannot hold out or haggle if the asked price is rising. He must pay whatever is asked for the 100 shares of American Can. It is assumed, of course, and rightly, that the market in an active stock like this does not vary a great deal from one sale to another and the chances are that the customer will get his stock for a price very close to 139, the last sale price recorded.

The Limited Order

Suppose, however, that the customer decides not to take a chance on paying more than 139 for his stock, that he is not in a hurry for it, or that he expects it to go slightly lower for the moment. Then he puts in a "limited" order, calling for the pur-

¹ See also Chapter XII, p. 251. ² See also Chapter XII, p. 253.

chase of 100 shares of his stock at 139. This means that his broker is not allowed to pay more than 139 for the stock. If he can get it for less he will certainly do so. He will probably get it at exactly 139, but if the lowest asked price is higher than 139 on the floor of the Exchange the broker will not buy the stock, for he is limited to buying it at a price not higher than 139.

The Market Order

If the customer decides to buy at the market, he picks out one of the "BUY" pads, writes below that word, "100 American Can at the market," or "100 Can @ market," tears it off the pad and hands the slip in through the order clerk's window. If he decides to buy his stock only if it is available at his limited price of 139, he writes under "BUY," "100 American Can @ 139." In either case he must be sure to sign his name at the bottom of the order slip, as in Plates 8 and 9, on page 54.

It is possible, in the case of his limited order, that the broker will not be able to execute the purchase when he receives the order, since the asked price is over 139. The broker must then know whether he is to keep on bidding 139 for the stock or how long he is to try to get it at that price. For this reason every limited order must have a time limit added to it. If the customer wishes his broker to continue trying to get the stock at 139 indefinitely, he writes on a "BUY" slip, "100 American Can @ 139," and adds at the bottom of the slip, "Good until cancelled," or "G.T.C." Many order slips have the words "Good until" printed at the bottom of the slip, leaving a space after those two words for the customer to fill in the rest.

Good Till Cancelled Order

If the customer writes "G.T.C." on his order slip, the broker will turn the order over to the specialist in that stock and so continue to bid 139 for 100 shares of American Can indirectly, until he gets the stock or until such time, perhaps a month from now, when the customer gives up hope of getting his stock for

the price named, or decides he does not want to buy it even at that figure. In such case he cancels the order and it becomes null and void. He may use one of the "CANCEL" pads for this order or he may simply write "Cancel to buy 100 American Can @ 139," and mail it to his broker or deliver it personally through the regular order clerk's window.

If the customer is unwilling to wait for his stock at 139 he writes on the limited order blank, "Buy or Cancel" or "Cancel

FORM 4

LELAND & CO.
BUY LOS ANGELES, CAL. *April 20* 19*29*
100 Can @ 139
George H. Angell
 KEEP THIS ORDER GOOD UNTIL *Thursday*

PLATE 10. LIMITED BUY ORDER

CANCEL
To Buy 100 Can
@ 139
Good till Thursday
George H. Angell

PLATE 11. CANCELLATION FORM

In Plate 10, Mr. Angell has given his broker a "limit order" with a time limit also, "Good till Thursday." In Plate 11, he has cancelled this order, presumably before Thursday, since it would automatically be cancelled if not executed at the close of Thursday's trading.

if not executed." In this case the broker tries only once, when he receives the order, to execute it. If the stock is not available at 139, the order is immediately and automatically cancelled.

Time Limits on Orders

If the customer decides to wait only that day for his stock at 139, he writes on his order blank, "Good today only." This is called a limited "day order" and if not executed at the close of business that trading day, the order is automatically cancelled.

The customer may also decide on various time limits for his order, writing such limits as "Good this week," "Good until Friday," "Good until August 1st," etc. If he writes "Good

until Friday," then the order will "stand" until the close of business on that day. If it has not been executed by that time, it is automatically cancelled. Another type, the stop-loss order, is described in a later chapter.¹

Almost the same order processes apply to the opposite side of trading—the selling side. The only difference is that the customer uses the "SELL" pad instead of the "BUY" pad to enter his orders. Market orders, limited orders, time limits, cancellations and the other order conveniences described above follow the same practice in selling as in buying.

¹ See Chapter XX.

CHAPTER IV

FOLLOWING A TYPICAL TRANSACTION

What Follows an Order

In the two previous chapters we have studied the general mechanical facilities of the New York Stock Exchange and the average brokerage commission house. We have examined the rudimentary details necessary for opening a stock trading account and the usual customary procedure for initiating an order for execution on the Exchange.

We still have much to learn, however, as regards the intricate processes which are set in motion when the customer writes out an order and slips it through the window of the order clerk's office. We have previously taken a passing glance merely at some of the physical machinery. Let us now watch that machinery in action and marvel at its rapidity, its exactitude and its specialization of a service differing in degree, but not in kind, from the purchase of Tiberius Polonius' sunny villa on the Ap-pian Way 2,000 years ago. We are still dealing primarily in the transference of physical and productive property, even though the technicalities involved in modern scientific methods of trading may tend to withdraw our attention temporarily from that fundamental point.

A Concrete Example

To follow a concrete example, let us say that Mr. Angell, the customer, has just opened an account with the Los Angeles branch of Leland & Company, his brokerage house, and decided to buy 100 shares of American Can at around 139. Mr. Angell of Los Angeles wants to be sure of getting the stock immediately so he uses a market order.

He walks over to the order desk, selects the "BUY" pad, writes "Buy 100 American Can @ market," signs his name, tears off the slip and hands it through the window. The order clerk, who sits constantly waiting for just such orders, enters the order in his book, stamps the time on it, and sends it, or more probably merely hands it across a few feet of space, to another cage or office where the telegraph operator sits waiting, also for just such business, and in constant touch with the firm's main or correspondent office in New York City.

The telegraph operator immediately wires the order through to the main office in New York, "Buy 100 Can at market." If there should be a question of sufficient funds the order clerk in the Los Angeles office would first notify the margin clerk of this particular order and the margin clerk would look up Mr. Angell's account to see how the purchase of 100 shares of American Can at around 139 would affect the account before he sent the order on to New York. If he finds that with this purchase the account is still in good order he sends back an "O.K." memo to the order clerk. If the margin clerk should find that such purchase would reduce the customer's equity in such measure as to impair his account he takes the matter up with one of the managers or customers' men who will explain to the customer that the order cannot be filled unless more margin is posted. If the customer refuses to furnish additional security the order for American Can is not dispatched, but it is very seldom, of course, that such a situation would arise. The customer generally knows his own standing on balance and would not order purchase of the stock unless he knew his account was in position to stand it.

The Order Received

While we have been discussing the state of Mr. Angell's account with Leland & Company of Los Angeles, therefore, the telegraph operator of the New York office has undoubtedly received the wire from the Los Angeles branch, "Buy 100 Can at market." The operator immediately hands it to an order clerk who enters the order, stamps the time and picks up his private

telephone which connects him instantly with the floor of the New York Stock Exchange. There he talks with the floor telephone clerk of the firm, waiting constantly at his 'phone booth, one of many which we have previously seen lining the walls around the floor of the Exchange.¹

The 'phone clerk enters the order to "Buy 100 Can at market" on another slip of paper which is destined for the hands of the firm's actual floor broker, a member of the firm as well as of the New York Stock Exchange, who thus is qualified to trade for his

BUY <i>100 Can</i> <i>@ market</i> LELAND & CO. BOOTH F
--

PLATE 12. FLOOR BUY SLIP

FORM B LELAND & CO. BOOTH F <i>Bought</i> <i>100 Can</i> <i>@ 139 3/8</i> <i>Miami Brothers</i>

PLATE 13. FLOOR PURCHASE REPORT SLIP

The 'phone clerk on the Floor transmits Mr. Angell's buy order to the broker on the Floor Buy Slip. When the broker has executed the order, he reports purchase to his 'phone clerk on the Floor Purchase Report Slip, to be 'phoned to Leland & Company, who notify Mr. Angell that his order has been executed.

particular house. The firm broker is hanging around his telephone booth if business is light and he is not busy, so that it is a simple matter for the 'phone operator to call him over and give him the order to "Buy 100 Can at market."

¹ See Chapter II, p. 30.

Signalling the Broker

If business is heavy or if he is engaged in any other transaction at the time he may be anywhere on the floor of the Exchange. It looks large enough when empty and quiet, but during an active session, when hundreds of hectic brokers are milling and pushing and gesticulating and yelling about all of the various posts, it looks like pandemonium to the novice, and even the experienced telephone clerk or page boy might have considerable difficulty in locating the particular floor broker in question.

The floor telephone operator must remain constantly at his post, anyway, to take the other orders which may be coming in from his brokerage house in a steady stream. He cannot leave to hunt his man, therefore, but simply presses the button beside his firm's telephone. Instantly the call number of the firm's broker flashes out in white numerals from the black background of the two great annunciators which we have previously noticed on opposite walls of the Exchange floor. The broker, who constantly keeps a weather eye out for his call number, even while in the midst of heavy transactions, completes what business he is engaged in and hurries over to his telephone booth where he receives the order to buy 100 Can at market, on the firm floor buying slip, shown as Plate 12.

The Broker does his Stuff

Back into the maelstrom goes the firm's floor broker, threading his way, or perhaps pushing his way, as rapidly as possible to the "Can post," where he knows he is most likely to find someone who will sell him 100 shares of American Can common stock at the best price available. If he had to go hunting and calling his bid throughout the entire floor of the Exchange, it would take an interminable time to locate his "market." But thanks to the system of dividing the stocks up among the different posts it is a comparatively simple matter for the broker to find other brokers who have orders to sell various amounts of the stock he wants to buy.

The True Market

Right here, to hold up our transaction for a moment, is the actual apex of the "market." When the broker goes with his order to buy Can and finds his fellow brokers who are eager to sell Can the fundamental and economic use of the New York Stock Exchange is definitely asserted and the same holds true for any stock exchange. Here are shades of Tiberius Polonius bargaining for his villa. Here are shades of the British tradesmen bargaining for stock in the East India Company. Here are the progeny of the group of early New York business men who were wont to gather near the foot of Broad Street nearly 200 years ago to trade grain, cattle, furniture and slaves. Here are the modern counterparts of the dozen traders who used to gather under the buttonwood tree on Wall Street to trade in the few stocks then available.

Here is the true "market." Here buyer meets seller and here are set up the values which affect the modern financial and business world. Here are set the prices not merely for stocks, we recall, but the going, or market, values for physical and producing properties, for the wealth of a whole nation, and a whole financial world.

Supply and Demand

If, at this point in the picture, there are more brokers trying to buy than to sell, then the valuation on our national business body tends upward, profits accrue to millions, and the country is probably prosperous. If, on the other hand, there are more brokers desirous of selling than buying, then prices for stocks and values for properties of the nation decline, millions of people see their holdings in such properties fade away in comparative values, business goes dead, and panics, perchance, ensue.

These analogies are overdrawn, of course, but the author wishes to emphasize the theoretical as well as the practical importance of this place where, and this time when, the agents of the buyer and the seller meet, and the prime importance of the price at

which they meet in their trade. For that price is significant of the changing value of physical and productive property and not merely of changing quotations of stocks.

The Broker Surveys his Market

So the broker who has his order to buy 100 Can at the market makes his way to the "Can post," and enters the "Can crowd." He first glances at the board on the post and sees that the last sale of Can was at $139\frac{1}{4}$. That sale has been made, along with perhaps some others, since the time, perhaps two or three minutes ago, when Mr. Angell, our new brokerage customer in the Los Angeles branch of Leland & Company, saw the ticker report of 100 shares of Can sold at 139 and forthwith decided to buy himself that number of shares at approximately the same figure.

The broker realizes, therefore, that he may have to pay an advancing price for Can, in other words that demand for the stock has slightly outrun the supply in the last few minutes. He tries, however, to buy at the lowest possible price for his unknown client. He hears some other optimist bidding 139 for Can so he realizes that he must pay more. He hears other brokers asking $139\frac{1}{2}$ for 100 shares of the stock but at the instant there are no takers at this price.

The Broker Bids

So our broker shouts, "Buy a hundred Can at an eighth," meaning that he will buy 100 shares of American Can at $139\frac{1}{8}$. He hears no receptive answers, and next he shouts, "Buy a hundred Can at a quarter," raising his bid price to $139\frac{1}{4}$. Still there are no brokers who are able or willing to sell at this figure, and all he hears on the selling side is the repetition of the previous cry, "Sell 100 Can at a half," meaning that another broker is willing to sell 100 shares of American Can at $139\frac{1}{2}$, no less. Finally our own broker raises his bid price another eighth, and shouts, "Buy 100 Can at three-eighths." Meanwhile, another floor broker has pushed his way into the crowd, tries first to sell 100 Can at $139\frac{1}{2}$,

finds there are no takers at that price, hears our broker bidding 139 $\frac{3}{8}$, rushes over to him and yells, "Sold."

At this instant when the other broker calls out his cry of "Sold," our model transaction is completed. Buyer and seller have met, have bargained and have contracted to exchange property at a mutually agreed and agreeable price. Here then is the climax of all operation in stock trading. It takes place far from the brokerage office, thousands of miles, perhaps, from the real principals in the transactions; the dramatic instant which clinches the deal is witnessed by only a handful of people and especially noted perhaps only by the reporter who records the transaction for the ticker.¹ For the brokers directly involved it is all in the day's work and, the transaction completed and reported, they rush on to other dealings. But the importance of the transaction, potentially and theoretically, cannot be overestimated. It is the direct purpose for which the stock exchange has come into being.

Completing the Trade

As soon as the other broker has cried, "Sold," the transaction is complete, though its accompanying details are not. Our own broker takes the precaution of confirming his hearing of the contract by repeating, "Bought from you 100 Can at 139 $\frac{3}{8}$." The other broker may also reply in confirmation, "Sold to you 100 Can at 139 $\frac{3}{8}$." They each write floor sale report slips (See Plate 13), the one reporting the sale to his office, our own broker reporting his purchase to his own office. Our broker reports, "Bought 100 Can at 139 $\frac{3}{8}$ " from whatever the firm represented by the broker who sold him the stock.

He then rushes back to his telephone booth, gives the slip to the telephone operator there, and the broker's part of the transaction is completed. He goes on about his other business, repeating this process of bidding for stocks and selling them at the best possible prices in constant succession all day long. He may take 10 or 15 minutes off for lunch but while he is gone his telephone

¹ See Page 72.

operator refers any immediately executable orders to some other agreeable broker, usually one of the "two-dollar brokers" whom we met several chapters earlier. The floor broker himself will not absent himself from the floor for any longer time than is absolutely necessary, however, for whatever business is done through another broker while he himself is away means splitting of his firm's commissions with the substitute brokers and a consequent diminution in the net income for his own house.

The Broker Reports

While the floor broker goes on about his other business, forgetting his previous transaction, two other important processes are still going on. The telephone clerk, as soon as he receives the floor purchase report slip (See Plate 13) from his trader, lifts the receiver of his 'phone and reports to the order clerk at the originating New York broker office, "Bought 100 Can at 139 $\frac{3}{8}$."

The order clerk enters this report, stamps the time on it, notes that his record shows it originated in the Los Angeles office, writes out a duplicate report, and passes it in to the wire office. The telegraph operator stamps the time on this report, opens his Los Angeles key and clicks out, "Bought 100 Can at 139 $\frac{3}{8}$." The wire clerk in the Los Angeles office of Leland & Company receives the wire, writes it out, stamps the time on it and passes the notation along to the local order clerk.

If Mr. Angell has waited around the office for a few minutes he will receive either direct from the order clerk or through the hands of his own customers' man his own report, or confirmation, reading, "We have this day purchased for your account and risk, according to New York Stock Exchange rules, the following." Or, more often, merely the word, "Bought," or "Sold." This much is on the printed confirmation slips of the firm. Below, is written, "100 American Can @ 139 $\frac{3}{8}$," similar to Plates 14 and 15.

Speed of Transaction

We have followed this transaction in close detail to show the physical operations which are set in motion and followed through

from the time the customer passes the order clerk his order to buy, and the time he receives back from the order clerk the report showing that his brokers have completed the purchase. Our detailed description of the whole process has perhaps made it seem a cumbersome and lengthy procedure but in truth it is not. The very details which have taken time to explain and record are

LELAND & CO MR. <i>George H. Angell</i> BOUGHT <i>100 Can</i> <i>@ 139 3/8</i> CUSTOMER

PLATE 14. CUSTOMER'S PURCHASE
REPORT SLIP

MIAMI BROS. MR. <i>John H. Mills</i> SOLD <i>100 Can</i> <i>@ 139 3/8</i> CUSTOMER
--

PLATE 15. CUSTOMER'S SALES RE-
PORT SLIP

In Plate 14, Leland & Company report to Mr. Angell their execution of his order, shown in Plate 8. In Plate 15, Miami Brothers report to Mr. Mills their execution of his order shown in Plate 9. The report slips are usually made out in quadruplicate for the broker's records, only the fourth copy going to the customer.

the very factors which contribute to make the operation truly simple and exceedingly speedy.

The entire process of the purchase of Mr. Angell's stock has taken much less time than it has taken the reader to peruse its description. Through the medium of direct and private telegraph service, it is possible to complete such a transaction from Los Angeles to New York and return inside of three minutes, from the time the customer hands his order through the clerk's

window to the time he receives through that window his confirmation of the completed transaction.

We shall not weary the reader by going through the selling end of such a transaction step by step. Suffice it to say that practically the same steps, the same procedure, the same speed, efficiency and accuracy hold for the origination and execution of a selling order as we have witnessed in the case of this buying order.

The Seller

In order to understand more clearly, however, the importance of the stock exchange as a ready market for stock transactions we may consider for a few moments the origination of the stock which Mr. Angell, our Los Angeles customer, has just purchased. Let us say that in Miami Brothers' branch brokerage office at Miami, Florida, the same morning, there sat a customer, a certain Mr. Mills, who had realized the increasing value of the physical and producing properties combined under the corporate organization of the American Can Company somewhat earlier than had Mr. Angell of Los Angeles.

The trader in the Miami office had bought his interest in American Can property a year before. He had in his safe deposit box his certificate for 100 shares of American Can common stock. Likewise, due to his foresight, he had a nice paper profit in that stock. Let us say that Mr. Mills had bought it at 94. Having paid \$9,400 for his lot and seeing the ticker quotation on this particular morning at around 139, he figured that he could now sell his equity in that property at \$13,000, realizing by such sale a profit of 35 points per share, or \$3,500.

The Miami trader may have decided that this equity in American Can was now selling for all it was worth, compared with the bargain price at which he had previously purchased it. He may have decided he could take this capital and buy some other stock which had not advanced to its full worth and was still quoted at bargain prices. He may have decided to pay off the mortgage on his home or his Florida real estate. Or he may merely have

decided that he preferred a trip abroad to his equity in American Can Company stock.

Whatever his reasoning, here was a man who decided to sell his 100 shares of American Can at around its then current quotation of 139. It was not necessary for him to go to his safety deposit box and get his stock certificate before giving his selling order. It was perhaps advisable to deliver it to his broker first, but if he did not the broker would arrange for deferred delivery or debit him "short" 100 shares of Can until he actually made delivery of his stock to the broker.

The Selling Order

In any case, Mr. Mills of Miami came to his decision and handed his order in through the order clerk to sell 100 American Can at $139\frac{1}{4}$ at just about the same time that Mr. Angell of Los Angeles turned in his own order to buy 100 American Can at the market. The Miami customer was in no great hurry to sell his stock. He also felt that sometime during that trading day Can would sell fractionally higher than the then current price of 139. So he placed his "limited selling order," indicating that he would take no less than $139\frac{1}{4}$ for his stock. Instead of marking his order "G. T. C.," he might, of course, have substituted at the bottom of his "SELL" slip, "good today only," indicating that he would wait for the higher price but that if such price was not reached and the stock remained unsold at the close of business that day, the order would automatically be cancelled.¹

The floor broker representing the Miami customer's commission house received his order (see Plate 16) to sell 100 Can at $139\frac{1}{4}$ from the 'phone clerk just a little after the Los Angeles order to buy 100 Can at the market had reached the floor. The Miami broker reached the Can post at the moment when the Los Angeles broker was calling, "Buy a hundred Can at a quarter," and when other brokers were calling, "Sell a hundred Can at a half." The Miami broker took in the situation at a glance. He saw that there were no bids at a half, though he tried once

¹ See Plate 9, p. 54.

to sell his 100 shares at that price just to make further test of his market. His order called for a price of at least $139\frac{1}{4}$ for the stock he was selling, but it was his duty as a good broker to get as much over that price as possible — to get as good an execution as he was able to accomplish.

While there are no bids at $139\frac{1}{2}$, here was this Los Angeles broker bidding for 100 shares at $139\frac{1}{4}$. The market is rising. The Miami broker can get at least the limit price of $139\frac{1}{4}$ for his 100

SELL <i>100 Can</i> <i>@ 139 $\frac{1}{4}$</i> <i>G. J. C.</i> MIAMI BROS. BOOTH D
--

PLATE 16. FLOOR SALES SLIP

FORM 9 MIAMI BROS. BOOTH D <i>Sold 100 Can</i> <i>@ 139 $\frac{3}{8}$</i> <i>Seland & Co.</i>

PLATE 17. FLOOR SALES REPORT SLIP

The 'phone clerk on the Floor transmits Mr. Mills' sell order to the broker on the Floor Sales Slip. When the broker has executed the order, he reports sale to his 'phone clerk on the Floor Sales Report Slip, to be 'phoned to Miami Brothers, who notify Mr. Mills on the Customer's Sales Report Slip, shown in Plate 15.

shares. He finds that the Los Angeles broker has advanced his bid price successively from 139 to $139\frac{1}{4}$. He assumes, therefore, that the purchase order is not limited — that is, that the Los Angeles broker must keep on raising his bid price until he finds a seller.

The Broker and "Good Executions"

This is "meat" for the Miami broker but he cannot go too far. He knows that the next bid of the Los Angeles trader will be at $139\frac{3}{4}$ and that there is plenty of Can being offered at $139\frac{1}{2}$. Miami will have difficulty, therefore, selling his 100 shares at $139\frac{1}{2}$, but he can sell it for $139\frac{3}{4}$. When Los Angeles finally raises his bid price to that figure, therefore, the Miami broker accepts the price and yells, "Sold." He has gotten all he can for his client's 100 shares at that moment, and he has gotten an eighth of a point more for the stock than his low limit of $139\frac{1}{4}$.

It may appear that the Miami trader was ahead of the game by using a limited order while the Los Angeles customer lost out by using a market order. This is by no means necessarily the case, however. Mr. Mills of Miami would probably have gotten the same price for his stock on a market order, for the market was rising and favored the seller against the buyer. Mr. Angell of Los Angeles had to pay more for his stock than he intended to, but he was buying it because he expected a greater advance than a fraction of a point. And if he had put in his buying order limited to $139\frac{1}{4}$, he would not immediately have gotten his stock.

The rising market might have waxed stronger and the price advanced right on up 10 points or more in a week without his broker ever getting a chance to execute the limited order at $139\frac{1}{4}$. In such a case Mr. Angell would have lost out on a 10-point profit because he tried to quibble over a small fraction of a point. And if the stock advanced, of course, he would not have been sorry that he paid $139\frac{3}{4}$ for his 100 shares instead of $139\frac{1}{4}$, if the stock sold around 150 the following week.

Reporting to the World

The other process which we mentioned as still going on after the floor brokers on the New York Stock Exchange had handed their reports to the 'phone operators and gone on about their other business has to do with the system for reporting the transaction to the public. No other stock exchange or public market in

the world gives such speedy and complete publicity to the trades made upon it as does the New York Stock Exchange through its ticker system.

The Exchange employs not far from 500 messenger boys or "pages" of different types, all performing diverse and important services. In addition to these pages, and the perhaps 400 or 500 floor brokers doing actual business as members of the Exchange, there are about 200 reporters and telegraphers, several hundred miscellaneous clerks and about 1400 telephone clerks. The total population on or around the floor of the New York Stock Exchange during a normal trading session is likely, therefore, to run between 2,500 and 3,000. Little wonder that an active session looks like "all bedlam let loose" to the casual observer from one of the visitor's galleries. Little wonder that each man must be quick-witted, must know perfectly his own job and pay strict attention to that job, and to none other, in order to keep the Exchange business running smoothly, regularly and accurately.

The reporters mentioned above are stationed at different stock posts, or counters, as the new-style Exchange posts are sometimes called. There are perhaps 10 or 15 reporters at each post and they circulate about in the trading crowds and receive reports of every transaction completed at their post. As soon as our two floor brokers closed their transaction, one of these reporters filled out a form slip saying merely, "AC-139 $\frac{3}{8}$," meaning that 100 shares of American Can common stock had changed hands at the price of 139 $\frac{3}{8}$. The reporter then sent this slip as quickly as possible to the nearest of the six telegraph, or ticker, stations, which are also located on the floor of the Exchange.

Ticker Operators

Each of these six ticker operators sits before a rather simple-appearing machine not unlike a typewriter. His clerk is constantly receiving such reports of transactions on the floor of the Exchange from the reporters. The clerk arranges them in the most advantageous order and "feeds" them to the operator, by placing them before him for transmission.

To save time and reduce the number of symbols printed, the clerk will allow a number of slips to accumulate in a single very active stock, for perhaps a minute, and then feed them to the operator in order of their receipt. Thus if there had been six transactions in Can received by the ticker machine clerk in about a minute, he would try to give all six of these reports to the operator at once and in order. This accounts for the appearance of "strings" of transactions in any individual stock, appearing on the ticker tape. By stringing such reports the ticker might present, "AC-139—5 39 $\frac{1}{8}$ —2 39 $\frac{1}{4}$ —9 $\frac{1}{8}$ —2 39 $\frac{1}{8}$ —139—5 39 $\frac{1}{4}$ —39 $\frac{1}{4}$ — $\frac{3}{8}$, etc."¹ By thus stringing the reports the operator saves the necessity for repeating "AC" before each price at which the transaction was made.

As such reports are typed out on the ticker machine, they manufacture a perforated tape, somewhat similar to a player-piano roll, or the tape used in modern telegraph transmission. Since there are six such operating stations on the floor of the Exchange, and only one master ticker machine, the master tape output of each of the six operators is automatically taken, in turn, and in rapid rotation, by the master machine. Through use of this tape the master machine telegraphs the continuous output of the six individual machines, or the complete record of transactions, over the stock ticker system.

The Ticker System

This ticker reporting system is under management of the New York Quotation Company, a subsidiary of the New York Stock Exchange with offices in the same building. The perforated tape, fed through the master ticker machine, depresses keys and makes contacts which operate receiving machines, more familiarly known as tickers, which print exactly the same symbols which the operators have printed on their electric typewriters on the floor of the New York Stock Exchange.

Since the New York Quotation Company tickers serve only the offices of members of the Exchange which are located below

¹ See Page 52.

Chambers Street in New York City, another agency, the Western Union Telegraph Company, undertakes, through special contract with the New York Stock Exchange, to relay the stock market ticker quotations to the tickers which are located in the other portions of greater New York and throughout the country, as well as to non-members of the Exchange in the financial district. The Western Union simply reprints, by the same electro-telegraphic machinery, the report of the original ticker service. The Western Union machines are just as fast as those of the Exchange and the continuous record of transactions on the New York Stock Exchange is recorded on about 11,000 individual tickers, located in nearly 400 cities throughout the entire United States and Canada.

On normal trading days, when the volume of sales is not too great for the Stock Exchange tickers to handle comfortably, the record of transactions on the floor of the Exchange appears on the stock market tickers throughout the United States and Canada on an average of from one to two minutes after the transaction has actually been closed by the trading members of the Exchange.

Ticker Delays

The physical capacity of the old-style stock ticker, however, was only about 300 symbols per minute, and this capacity was entirely too small to handle the volume of transactions as they were made, when sales ran up over an average of 5,000,000 shares per day. Even operating at its highest physical speed and capacity, and with the greatest economy of symbols and figures, the old-style ticker was woefully inadequate for the quick reporting of heavy trading on the New York Stock Exchange in recent years. In some of the huge markets of 1928 and 1929 the ticker reports of actual sales and prices lagged over an hour behind the actual market for hours at a time. On one of the heaviest days of trading in October, 1929, the ticker was two hours and 40 minutes late at the close of the market, and the final transaction at the close of the actual market trading, which took

place at three o'clock, was not printed on the ticker tape until after seven o'clock in the evening.

It is on days of heavy trading, when the market is excited and when prices are moving rapidly, that the trading public is especially anxious to have information on actual current prices ruling on the floor of the Exchange at any given time, and it is at such times that the old-style ticker has fallen down the most unsatisfactorily.

On such days of hectic trading and a late ticker, some measure of relief is generally given by printing the actual floor prices of 20 or 30 of the leading and most active stocks on the bond market ticker. A special ticker is maintained for bond transactions, and since bond trading is usually dull when interest centers in the stock market, the bond ticker can comfortably accommodate this extra load. Such quotations are usually printed on the bond ticker, therefore, at 10-minute intervals, and offer some suggestion of what the market as a whole is doing.

Even though it is an aid, however, such selected transactions as are carried on the bond ticker when the stock ticker is delayed are far from a solution of the problem, and criticism has been general from the brokerage houses as well as from the trading public. Stock Exchange authorities are doing their best to overcome the difficulty and have developed a new ticker which has a capacity of nearly 900 characters per minute, instead of the bare 300 per minute attainable by the old-style ticker.

The New High Speed Ticker

The new ticker machines are being gradually installed, but it is a slow process and the new system cannot be commenced until all of the downtown tickers have been changed. Authorities estimate that it may be late in 1930 or early in 1931 before the new-style tickers will be completely installed and in operation. It is also estimated, however, that these new tickers will be able to handle 6,000,000 and 7,000,000 share days with something approximating the speed of actual trading on the New York Stock Exchange. With the prospects that, despite periods of

intermittent quiet, the trend of stock market activity is definitely higher, however, it seems quite impossible that the single ticker system of reporting transactions can cope with the peak periods of active trading in future years. It seems only a question of time when either two separate ticker systems must be operated, or else some revolutionary improvement for even greater speed shall be made in the present type of ticker used on the single system. Plate 18 shows one of the new-style tickers recently installed in the downtown district of New York City.

Despite this digression to discuss one of the few inadequacies of the New York Stock Exchange machinery, it must be said, in justice to that institution, that such serious ticker delays do not occur very frequently. Generally, and in normal trading, the stock market ticker tape is right on the heels of the actual transactions as they are completed on the floor of the Exchange.

Back to the Example

Several pages back we left our original customer, Mr. Angell, out in Los Angeles, fingering the confirmation just received from an order clerk, showing that Leland & Company had bought for his account 100 shares of American Can common stock at a price of 139 $\frac{3}{8}$.

Through the mediums of the telegraph and ticker systems which we have just been discussing, the world has been apprised of that transaction long before this. In fact, if the ticker was up to its usual efficient performance, our customer might easily have seen the record of his purchase appear on the ticker tape in Los Angeles almost as soon as he received his confirmation of the trade through the order clerk's window.

On the other hand, considerable misunderstanding often arises between customer and broker over prices paid or received, due to this very speed at which the ticker normally operates. Despite the dispatch with which any order is carried out, despite the efficiency of the whole machinery for stock trading, a fair amount of time must be allowed for actual transaction after the order is given. And a fair amount of time must also be allowed for actual



Copyright N.Y.S.E.

PLATE 18. THE NEW HIGH SPEED TICKER

Replacing the old glass-covered type. The new ticker has a capacity of nearly 900 characters per minute compared with the old machine's capacity of barely 300 characters.

printing of the trade on the stock ticker after it has been consummated on the Exchange.

When the customer enters his order he generally has nothing better to do, if he is actually present in the customers' room of his brokerage house, than to watch for his transaction to appear on the tape. While he is waiting, seconds seem minutes and minutes seem hours. In the case of our own customer who was buying American Can he was watching what we have previously seen was a rising market. He first saw a transaction at 139 and so assumed that when he entered his order, after seeing that transaction, he would still be able to buy at or very near that price.

Misunderstandings of Tape Watchers

He sits, therefore, and watches the tape, paying special attention to every sale of Can that is printed, thinking that each one is undoubtedly his unless the previous one was his. We have already seen that when the broker got to the Can post to execute the customer's order the last sale price on Can was $139\frac{1}{4}$. There were quite probably a number of transactions, therefore, between this one at 139 flat, which the customer saw before entering his own order, and the transaction of his own purchase at $139\frac{3}{8}$.

Watching the ticker for his sale, in the Los Angeles office, our customer may have seen his original price of 139. Then, perhaps, 500 at $139\frac{1}{8}$; 200 at $139\frac{1}{4}$; 100 at $139\frac{1}{8}$; 200 at $139\frac{1}{8}$; 100 at 139; 500 at $139\frac{1}{4}$; 100 at $139\frac{1}{4}$; 100 at $139\frac{3}{8}$; and so on. These sales of Can were interspersed, of course, between records of sales for many other stocks but they all came out during the seven or eight minutes after the customer had entered his order.

Watching this parade of trades in Can, he knows that one of the 100-share lots will represent his purchase. He also knows that the market is going up, and is desirous of getting his stock at a comparatively low figure. He hopes, therefore, first that the sale of 100 at $139\frac{1}{8}$ is his; then he is sure that the sale of 100 at 139 is his, and if not that one, then certainly the sale of 100 at $139\frac{1}{4}$ is his. He is likely to be a bit disappointed, therefore, when he finds that the sale of 100 at $139\frac{3}{8}$ was his.

The Broker is Usually Right

It is neither just nor useful to argue over a question like this one, however. Neither the broker in Los Angeles nor the broker in New York would knowingly conspire to cheat his customer out of an eighth or a quarter of a point on 100 shares, even if he had the time to think of such conspiracy, which, be assured, he has not. The broker, if he is a member of the New York Stock Exchange, is generally right, not because he is a broker, but because he knows his business, conducts it efficiently under very stringent rules and is governed by strict accountability to the New York Stock Exchange authorities for any minor infraction of such rules.

The traders in Los Angeles and Miami might almost as well have been located in East Stroudsburg and Pleasantville, or any other places in the United States. The important point as regards the economic usage of the New York Stock Exchange is that through this medium the buyers and sellers are brought together. Beside creating a constant barometer of the worth of physical property the stock exchanges of our country serve also the economic purpose of providing a ready and continuous market for the stocks there listed, inspiring public confidence and fostering the will to own properties and securities representing those properties, because they are at all times negotiable and liquid assets on which credit or cash may be easily realized.

CHAPTER V

DEVELOPMENT OF THE STOCK CLEARING CORPORATION

Delivery of Stock Traded

In previous chapters we have looked at the physical provisions for trading of the commission or brokerage houses and of the New York Stock Exchange. We have followed a stock transaction through from the time the orders were filed by customers to the time when they received their reports as evidence that their orders were carried out. For the customers concerned, the most important part of the transaction was the few moments when their respective agents were bickering on the floor of the New York Stock Exchange for the most satisfactory prices obtainable at which the trade could be made.

With the filing of the reported transaction and its recording on the ticker tape, however, the procedure is by no means ended so far as the brokerage house is concerned. It will be noted that the brokers for neither the Los Angeles nor the Miami customer made any exchange of stock when they "completed" their deal. They merely exchanged their oral assent to the agreement. Their business was to make the contract involving the shifting ownership of the 100 shares of American Can. It remains for the brokerage houses themselves to complete that contract through the actual exchange of the stock certificates.

To understand fully the methods by which such actual transfers and deliveries of stocks and securities are made in the present day operations of the stock exchanges it will be necessary for us to pay strict attention and embark upon a rather involved study of the stock clearing associations which serve all modern stock exchanges. And for our purposes a study of the Stock Clearing

Corporation, a subsidiary of the New York Stock Exchange, will be the most complete and the most satisfactory.

Negotiability of the Stock Certificate

When Tiberius Polonius bought his Appian villa 2,000 years ago he probably accepted the transfer of his property in person, receiving evidence of the ownership transfer from its previous owner, also in person. If life were as simple now as then, if such transactions were not more numerous and the variety of goods no greater, such form of personal delivery might still be in vogue.

Even in those ancient days civilization had perfected rules of trading to such an extent that title to property was based upon paper contracts with official records kept in the "recorder's office," not so very different from the modern practice of exchanging and recording deeds. Permanent property is not so easily movable and the paper which witnesses title to such property is the only practical method of transfer.

So it is with stocks and securities, which represent, as we have before learned, merely a part ownership in certain capital and productive properties. Today the security certificate represents the ownership of such property and we have previously described the various species of such ownership and certificate, including bonds and preferred and common stocks.

Transfer of Stock Ownership

Thus the actual transfer of such property need consist merely in the transfer of ownership or possession of the certificates representing that ownership. Records, similar to the deed recorder's books, are kept by the duly appointed registrars for stock certificates, each individual corporation designating such a registrar, generally a bank or trust company. Eventually, when a stock certificate changes hands through trading, the new owner must have title to the stock changed on the registrar's books but, since some certificates change ownership fairly rapidly, a modern device has been established which allows the transfer of actual own-

ership of certificates without constant recourse to the registrar for changing his records.

This modern device is the practice of "endorsing in blank," which will be explained more fully in a later chapter.¹ Suffice it here to say that the stock certificate is "good delivery" or readily negotiable and transferable, if it is signed on the reverse side by the original owner whose name appears on the stock certificate. The representatives of the Los Angeles customer, therefore, will be satisfied to receive the certificate of the Miami customer if it is endorsed by him in blank, and will pay the agreed price for such receipt.

Old Methods of Delivery Slow

The most simple method of effecting such exchange, of course, would be for the Miami broker to send the certificate for 100 shares of American Can common stock to the office of the Los Angeles broker in New York and receive in payment therefor the agreed price. In fact, that was the system actually used in stock market trading before the advent of the stock clearing arrangements.

It is easy to see that while such a process might not become overburdensome with only a few transactions a day, yet with steadily mounting exchanges it would consume a greater and greater amount of time and risk, to say nothing of the greater amount of bookkeeping and banking facilities necessary. Consider, then, an average modern day's trading on the New York Stock Exchange, when volume of transactions runs even at only 2,000,000 shares. Assuming that sales are made in an average of 200-share lots and at a price of 50, there would be a total of 10,000 trips to be made to receive delivery of stock certificates among the New York firms who are members of the Exchange. The total value of checks transferred would be \$100,000,000 per day. Small wonder that the conveniences of the stock clearing associations are responsible for increased trading capacity and lower overhead in modern security markets.

¹ See Chapter XIV, p. 334.

Fundamentals of the Clearing Principle

In simple essence, the stock clearing association operates considerably like a bank clearing association. In the latter, of course, only balances of debits and credits on individual checks are settled, instead of settling for each of the millions of individual checks passing between the various banks in individual cities and throughout the country.

In stock clearing operation, only the balances of individual stock owed or receivable are exchanged as a result of each day's transactions instead of running back and forth with each individual stock certificate whose exchange is called for by market transactions. Likewise, only single checks are given as a result of each day's transactions for the balance of each firm's credit or debit totals, instead of separate checks being given for each individual transaction.

A specific example will perhaps help in making the method clear. Suppose, during a single day's trading, that Aaron & Company sold 100 shares of Steel to Burton & Burton, who also sold 100 shares of Steel to Castel & Company who in turn sold the same number of shares of Steel to Disque Brothers. Consider the time and trouble involved in making these individual deliveries of stock and collection of the amount paid, if each transaction were carried out in the old way and in regular sequence. There would be three trips to deliver this same block of 100 shares of Steel and three separate checks to pay for such purchase, involving three separate uses of firm or bank credit.

A Specific Example

At the end of those three operations, however, the only change in status would be that Aaron & Company would have relinquished the 100 shares of Steel and received payment for them, while Disque Brothers would have received the 100 shares of Steel and made payment for them. Burton & Burton and Castel & Company would be in exactly the same position as regards the 100 shares at the end of the day as at the beginning. They would

not have them and therefore should not have paid out the full purchase price for them.

The same change in the day's status of these four companies can be accomplished in one transaction, through the medium of the stock clearing association, as would have required three transactions if the firms had carried out their business directly and personally, without the intervention of the "Clearing House." The Clearing House, through its complete record of transactions, finds that the only single operation necessary is for Aaron & Company to deliver 100 shares of Steel to Disque & Company and receive payment for them, thus eliminating the other two stages.

From the standpoint of actual time and energy consumed the saving is apparent. In a financial way the saving is also none the less real. Aaron & Company would not have delivered the stock to Burton & Burton until they had received full payment from the latter company. Burton & Burton, along with most brokerage houses, do the great majority of their business on credit. It would be necessary for Burton & Burton, therefore, to borrow from their bankers the funds needed to pay Aaron & Company for the stock. But Burton & Burton could not put up that stock as collateral for such a bank loan until they already had the stock and they could not get the stock until they had the loan to pay for the stock. To accommodate such situations bankers establish a fairly stable amount of credit for their regular customers, depending upon their financial standing, integrity, etc., accepting as security for such credit merely the unsecured note of the broker.

Savings in Credit

Such loans are called "unsecured day loans" and must be paid off as soon as possible by substituting the more regular and better secured "collateral loan." The bank also generally specifies that the broker must keep a certain percentage of such an unsecured day loan constantly on deposit with the bank, thus allowing the bank to earn interest on that permanently residual portion of the loan.

In any case, Burton & Burton must raise the money for pur-

chase of the 100 shares of Steel from Aaron & Company through recourse to their unsecured day loan accommodation at their own bank. They can then make out their check for the stock but it must be certified before Aaron & Company will accept it in payment and deliver the stock. As soon as Burton & Burton have paid for and received the stock, they put it up at once as collateral for their "collateral loan" and thus discharge their unsecured day loan at the earliest possible moment. This is the usual process for delivery and purchase of stock, and without the intervention of the Clearing House convenience such process would have to be followed also by Castel & Company in getting their stock from Burton & Burton, and by Disque Brothers, the final purchasers of the stock, in getting their certificate from Castel & Company.

Without the Stock Clearing House, therefore, there would be three separate processes of arranging unsecured day loans, certifying and presenting checks, arranging collateral loans and paying off the day loans. Through the stock clearing association the same results are achieved by only one such transaction, thus effecting not merely the saving in time and energy, but also a tremendous saving in the use of credit and checking accommodations.

Economic Service of the Clearing Principle

The advantages of a clearing association for the settlement of stock trading balances is thus exceedingly clear, and the growth of this modern adjunct of the general stock exchange has been in response to a definite need for simplification, speed and accuracy, just as stock brokers and the stock exchanges themselves were called into being by similar definite and apparent needs, due to business and economic growth of the various nations. The economic usefulness of stock clearing institutions is readily apparent. From a legal standpoint they also appear valid. There have at various times been doubts publicly expressed as to the validity of a contract in which no goods or cash is actually exchanged. The courts seem to have sustained the clearing system,

however, by rulings that such contracts are legal and valid so long as good faith exists on the part of both buyer and seller.

The saving in time and credit which results from the stock clearing system is dependent for its ends upon the accumulation of a series of trades, since the saving results in the balancing of such trades in volume rather than adjusting them as each individual trade is completed. There is a logical argument, therefore, that the longer the period of such accumulated trades the greater the saving in time and credit. On the other hand, there is a point of saturation, diminishing returns or plain confusion, beyond which extension of such periods of time defeats its own ends.

Periods of Settlement

Clearing houses in Europe and in most foreign countries adjust their balance settlements only at intervals of a week to a fortnight and are said to use "term settlements." London stock exchanges generally schedule their settlement days at fortnightly periods of time. The New York Stock Exchange and, following its example, most exchanges in the United States and Canada use what are termed "daily settlements." That is, stocks and money balances on trading are settled at the close of business every day, excepting Saturday.

There are arguments for both daily settlements and term settlements and there appears to have been more propaganda in this country for lengthening the period of settlement than there has been abroad for shortening it. The longer settlement periods add greatly to the savings in labor, credit and time which are the basic attributes of the clearing system. They therefore disturb the money markets somewhat less.

The daily settlement dates in the United States are the chief basis for our "call money market," which will be discussed later.¹ In essence this is merely a clearing house of its own for credit to be loaned out from day to day instead of for the usual longer periods, and its necessity, or at least its popularity, is due in large

¹ See Chapter XI, p. 224.

measure to the daily shifting of funds and credit demands, due to the daily clearing house settlement. The result of such daily shifting is an exceedingly unstable supply and demand with a resulting instability of call money interest rates whose frequently wide gyrations are often blamed for unfavorable effects upon the longer-term and more stable markets for money and credit.

Term vs. Daily Settlement

On the other hand, the daily settlements have the advantage of keeping balances on trading settlements fairly low, since no one firm can run up a very large credit or debit balance in a single day's trading. There is also the argument that term settlements merely bring greater strain and upsets for the money market when they do come around, whereas our daily settlements come so often that there are no regular peaks and dips in the credit situation. The argument appears open to question.

Perhaps the most valid argument for the daily settlement is the possible confusion of constantly mounting accumulations of individual transactions. The foreign markets do not trade at anything like our American rapidity or volume and the latter constitute arguments for short period settlements. There have been various attempts to introduce period settlements in the New York Stock Exchange clearing machinery, but thus far they have all met with defeat by the brokerage houses and Clearing House members concerned.

Settlement Rules for Regular Trades

Unless otherwise noted, understood and agreed to by both buyer and seller, all transactions on the New York Stock Exchange, and most American exchanges, are made in the "regular way," which means that delivery is called for by 2:15 P.M. on the day following the transaction. The New York Stock Exchange hours for trading on week days are from 10 A.M. until 3 P.M., and on Saturdays from 10 A.M. until noon. Transactions which are entered into on Friday and in the short Saturday ses-

sion are cleared on the following Monday, and in event of a holiday or Stock Exchange closing, under ordinary circumstances, such delivery is automatically postponed until the following business day.

Besides the "regular way" transactions, calling for delivery the following day, however, there are various other ways of trading allowed, so long as the two parties to the transaction agree on such understanding at the time of the trade. Delivery may be deferred for two or three days, in the latter instance being called delivery "at three days." Or delivery may be agreed upon for the same day as the transaction is made. This is called a "cash trade" and the stock must be delivered and payment made on the same day. Such deliveries are usually made outside Clearing House channels, or "ex-Clearing House."

Special Settlement Trades

There are also rules for delivery trading which call for delivery at varying or indeterminate dates, called "buyer's options," and "seller's options." Such options run for no less than four or more than 60 days. During that time, if the stock has been sold on a "buyer's option," the buyer may serve notice on the seller at any time to deliver the stock on the following day before 2:15 P.M. In the case of a seller's option, the seller may give notice on any day in that period of his intention to deliver the stock on the following day. Such transactions often carry a market price at variance with the "market" for an individual security traded in the regular way, and such transactions are therefore quoted separately in the newspaper stock market reports, to indicate the irregular delivery contract.¹

Such options may be made for less than 60 days if that is also mutually agreed and such sales are generally quoted with the price, followed by "S-20," or "B-30," meaning, seller's option within 20 days, or buyer's option within 30 days. The term option is more commonly used in bond market trading as the most convenient method of "selling short," in that market.²

¹ See also Chapter XVIII, p. 449.

² See Chapter XVIII, p. 451.

Old Process of Comparison

Going back to our primary consideration of stock clearing methods once more, it will pay us to understand first how the present system of stock clearings developed. In the old days as soon as a transaction had been completed on the floor of the Exchange the floor broker sent in his report to his commission house. As soon as this report was received the selling house prepared a "comparison slip," as a memo confirming the sale of the stock at

Central 0000	COMPARISON	Original
LELAND & CO. 115 BROADWAY NEW YORK, <i>April 20</i> 192<i>9</i> Bought of <i>Miami Brothers</i> ACCOUNT OF <i>100 Can @ 139 3/8</i> Deliver to Compared for the Seller by <i>MJD</i> Form 41		

PLATE 19. THE SIMPLE COMPARISON

Made out in duplicate by the seller and sent to the buyer for confirmation of the trade. Now replaced by Stock Clearing Corporation forms and generally used only in cases where the Clearing House does not act.

the price reported. This was made out in duplicate and the selling firm's messenger took both copies to the buying firm. Here the confirmation was compared with the buying firm's report. If the confirmation or comparison slip of the seller agreed with the report of the buyer, the buying firm's clerk stamped both copies, retained one and sent the other back to the selling firm by its waiting messenger. In like manner the buying house might also send such a comparison to the seller and receive his confirma-

tion. The double process is termed the "exchange of comparisons."

We shall see in a few moments that this original custom of comparison is still followed in a general, but more convenient, way, even in modern clearing house procedure. And in the special case of those stocks which are not handled by the Clearing House association machinery the old-time process is still followed quite closely. In fact, it is an iron-clad rule of the New York Stock Exchange that such comparison of trades must be made within one hour and a half after the close of the Exchange on the same day that sale of stock has been consummated on the floor.

Under the old methods, after this comparison was made, delivery of stock and collection of the purchase price proceeded between the individual brokerage houses throughout the following day, from 10 A.M. until 2:15 P.M., at which latter time all deliveries made in the regular way were required to have been effected. This time limit is still in effect today.

History of the Stock Clearing Principle

We have previously pointed out the economic necessity for greater speed and conservation of credit which called forth the development of the clearing house system. In his volume, "The Work of the Stock Exchange," J. Edward Meeker tells us that the first complete system of stock clearance was put into practice in Frankfurt, Germany, in 1867. All the stock trading world knew of its theoretical advantages and when it was found successful in practice its use spread rapidly throughout the large cities of Europe.

The Philadelphia Stock Exchange was the first American stock market to adopt the plan, but was followed May 17, 1892, by commencement of operation of the original Clearing House of the New York Stock Exchange. Comparatively slow in adopting the new method of settlements, the New York Stock Exchange built its machinery with a surer, stronger and wider foundation and has continued to build it and improve it until today it

stands as the largest, most rapid and most efficient clearing house in the world. It is marvelled at by European bankers and is used as a model by students from all nations.

Clearing Stocks

From 1892, therefore, until not so many years ago, the New York Stock Exchange was served by its original Clearing House. Here, during the night, balances of the stocks bought and sold during the previous day's trading were calculated, and by morning the brokers who had balances to deliver were directed where such delivery was to be made, while brokers who had balances to receive were informed from what broker they were to receive such stock balances. This clearing system was effective only for clearing of the stock itself. The following day, the money balances were delivered and paid in the old-fashioned method of personal messenger, certified check and all the ancient and slow machinery of direct contact between the individual houses.

Even this clearing of the stocks themselves worked a tremendous saving of time and was satisfactory to bankers and brokers for nearly 20 years. But not for all time. By 1913 business of the New York Stock Exchange had again grown to such a huge volume that both brokers and bankers again clamored for relief. How could the business of delivering stocks and paying for them be simplified still more? The answer was a simple extension of the clearing house idea.

The old Clearing House had taken care of stock balances only and not of payments for such balances. The stock balances were still delivered direct from one brokerage house to another and checks exchanged for such balances between the individual brokerage houses. The new step was to organize a clearing house system for the clearance of money balances as well as stock balances. Instead of the individual houses taking their individual checks from one house to another to settle for their stock balances the new Clearing House was to figure up their actual money balances due and receivable and become a central exchange where such credits and debits would be cancelled out as far as might be

possible, or "cleared," and thus make necessary the payment of cash *balances* only, through its clearing exchange facilities. This aspect of the clearing arrangement is generally termed the "settlement" side as against the actual stock "clearing" side.

Clearing Money

The new service of the clearing arrangement was merely an additional convenience for members of the clearing association and did not make any the less desirable or necessary the service of the old Clearing House in clearing actual stock balances. The old Clearing House had done away with most of the work in cancelling out credits and debits on stock. The new Clearing House was to do away with some more work by cancelling out credits and debits in payment for those stock balances. Such payments, even though made in the direct way, were much smaller in number and amount than before the practice of stock clearance. The new money clearance was merely another and further step in such reduction of the actual passing of money or credit from one brokerage house to another.

For over five years the clamor went on for such an extension of the clearing system from stock balances only to actual settlement of money balances. In 1920 the new plan was perfected. In December of 1918 the Governing Committee of the New York Stock Exchange organized a new clearing corporation, distinct in capital structure from the Exchange itself. It was capitalized at \$500,000, with 5,000 shares of stock of \$100 par value. It was called the New York Stock Clearing Corporation and is to all intents and purposes a subsidiary of the New York Stock Exchange.

The New York Stock Clearing Corporation

The new corporation commenced its operations on April 26, 1920, and has been in continuous and efficient operation ever since. The new association was organized largely to institute the new settlement of money clearance system but it also took over

the old system of stock clearance which, as we have noted before, was just as important as ever. In order to differentiate between the two clearing functions, however, the old stock clearing system has been given the name of the Night Clearing Branch, since its work is almost entirely completed during the night. The new money clearance system has been given the name of the Day Clearing Branch because its work occupies chiefly the daytime hours.

Having some idea of the aims and operations of the two branches as well as of their history and development, we are now prepared to go more fully into the details of their respective operations and the nature of their individual but co-operative duties.

CHAPTER VI

THE NIGHT CLEARING BRANCH

Saving Time by Large Volume

We have seen the advantages of a stock clearing association for simplification of transfer of a large volume of securities. The larger the volume of such securities cleared the greater is the saving in time. It follows, therefore, that in trading among the individual security issues listed on the New York Stock Exchange the greatest saving in time will occur in those issues which are most active, that is, in which the greatest number of sales or trades take place in a single day.

In our previous example of the three similar transactions in 100 shares of Steel, there would have been no very great comparable saving of time through the Clearing House if the only trade in Steel had been the sale of 100 shares by Aaron & Company to Burton & Burton. The saving came because Burton & Burton sold a similar block of the same stock to Castel & Company who in turn also sold a similar block of the same stock to Disque Brothers.

The Night Clearing Branch is able to handle only a certain and limited physical volume of clearances. Not all of the stocks listed on the Exchange can be cleared. It is only logical, therefore, that the list of stocks accepted for clearance should include the issues which are most active on the Exchange.

Regular or Cleared Stocks

At the present time only about 500 issues out of the 1,400 listed on the New York Stock Exchange are accepted for clearance by the Clearing Corporation. The list itself is subject to frequent change as market activity shifts from one stock to another. Except under special circumstances only lots of 100 shares

or over are thus accepted, and the odd-lot clearance must be carried out in the old manner of direct delivery from seller to purchaser. Also, only a limited number of bond issues are accepted for clearance. Besides the regular list of securities cleared by the Corporation, provisions are also made for clearing special individual transactions in issues not regularly cleared. In 1929 activity in convertible bonds became so large that provisions were made for clearing trades in about 20 of the most active convertible issues. The process is similar to stock clearing except that bond trades are entered for clearance the day after the trade, thus delaying clearance one day.

It must be understood that the Clearing Corporation operates only for the benefit and convenience of its members. Only the actual Exchange members of the association may do business through it. Practically all members of the New York Stock Exchange are also members of the Clearing Corporation. A non-member, having business with a member, cannot transact such business through the Clearing Corporation since both parties must belong before the Clearing House will clear their mutual transactions. An exception with regard to banks will be noted in our next chapter.¹

All full lots of listed stocks are "settled," or have their money clearance, through the Day Branch but only certain stocks, we have noted, are accepted for physical clearance by the Night Branch. It is necessary, therefore, to differentiate between those issues cleared and issues which are not accepted for clearance by the Night Branch. The former are termed regular or "cleared" issues, while the latter are called "ex-clearing house" issues. Such lists are frequently changed because of shifting activity.

In the case of issues which are regularly accepted for clearance, the rigid Stock Exchange rule is not relaxed but comparison forms are somewhat more simple. In both cleared and ex-clearing issues the exchange of comparisons has been made more convenient through the mediation of the Clearing Corporation. Instead of exchanging such comparisons direct the Corporation serves as a clearing house in this regard also. Members send

¹ See Chapter VII, p. 137.

their comparisons or exchange slips to the Clearing House directed to the other firm represented in each transaction, and the other firm receives such comparison from the Clearing House through the regular trips there of its messenger.

The comparison slips are somewhat different, however, in the case of cleared stocks. They are more than a mere comparison, in fact. They are an order on the Stock Clearing Corporation, acting as the combined agent of both parties, to deliver the stock represented in the comparison, on the part of the seller, and to receive the stock on the part of the buyer.

The Central Distributing Branch

We have previously noted that in the olden days, and also at present in the case of ex-clearing house issues, the seller originates the comparison, sending double comparison or exchange tickets to the buyer. So in the case of cleared stocks, the seller prepares a deliver ticket including this particular transaction, which is in effect not merely a comparison slip but also a direct order on the Clearing Corporation to deliver the stock mentioned. Likewise, the buyer prepares a receive ticket, which is not only a comparison but an order on the Corporation to receive for the firm's account the stock named. These comparison exchange tickets are delivered by the firms involved in the trade to the Stock Clearing Corporation and through those clearing facilities find their way quickly to the firm addressed, with whom the comparison is to be made. This central distributing section of the Clearing House is located in the basement of the Exchange building on the New Street side. All Exchange tickets must be in by 4 P.M. and called for by 4:20 P.M., except on Saturdays when the times are 1 P.M. and 1:20 P.M., respectively.

To cite a specific example, in assuring clearness, we may now go back to our original study of the trade of 100 shares of American Can, between the agents of the Los Angeles buyer and the Miami seller. We have seen the orders given and the transaction completed on the floor of the New York Stock Exchange. We have seen the two brokers involved in that trade give their

reports to their respective telephone clerks on the floor of the Exchange, and we have followed those reports as they were telephoned back to the firms' offices. We have also watched the customers' reports as they were telegraphed, one to Mr. Mills at

FORM 115		NO. 000		Our Line Number	61	New York,	April 20	1929
STOCK CLEARING CORPORATION (NIGHT CLEARING BRANCH)								
DELIVER TO		Leland & Co.						
100 shares		American Can		@ 139 ³ / ₈ s		13,937.50		
for account of the undersigned:								
Their Line Number		6		MIAMI BROTHERS		000		

PLATE 20. SELLER'S DELIVER TICKET

Made out in duplicate by the seller (Miami Brothers) and sent to the buyer (Leland & Company) for transmission to the Stock Clearing Corporation.

Miami, telling him that his 100 shares of Can were sold at 139³/₈, and the other to Mr. Angell in Los Angeles, telling him that his 100 shares of Can were bought at 139³/₈.

Effecting a Comparison in a Cleared Issue

It now remains for the two brokerage firms to arrange delivery and exchange of the actual stock. The clerk in the office of Miami Brothers, as soon as he has wired confirmation of sale to his customer, enters the trade on his brokerage house "blotter," which is a continuous record of all trades entered into by his house during the day's trading and is his own firm's record of total daily transactions. He then proceeds to fill out in duplicate his selling exchange or deliver ticket (See Plate 20), confirming sale of 100 shares of American Can at 139³/₈ to Leland & Company, and also by the same ticket (in duplicate) ordering the Stock Clearing Corporation to deliver the stock at the price named. The duplicate, or second half, of the seller's deliver ticket is in the form of a detachable sales ticket which carries the federal and state tax stamps, since such taxes are levied upon the seller and

not the buyer of any stock (See Plate 21). The exchange or deliver ticket, in duplicate, is dispatched to the Stock Clearing Corporation for delivery to Leland & Company. Leland & Company stamp both copies, tear them apart, return the duplicate exchange ticket with sales stamps, to Miami Brothers, and retain the original order for transmission to the Clearing Corporation as evidence that Miami Brothers have ordered delivery of the stock to them.

Meanwhile, the clerk at the office of Leland & Company, as soon as he has wired confirmation of execution to his client in Los Angeles, enters his purchase on the firm's blotter, and then

NO. 000	Our Line Number. <i>61</i>	New York, <i>April 20</i>	192 <i>9</i>
MIAMI BROTHERS 000		"SUBJECT TO THE REVENUE ACT OF 1921, AND REGULATIONS MADE IN ACCORDANCE THEREWITH"	
MIAMI, FLA.			
SOLD TO <i>Leland & Co.</i>			
<i>100</i> shares <i>American Can</i> @ <i>139$\frac{3}{8}$</i> \$ <i>13,937.50</i>			
Their Line Number. <i>6</i>			

PLATE 21. SALES TICKET

This is the second half of the Seller's Deliver Ticket shown in Plate 20. Originated by the seller, this half is stamped by the buyer and returned to the seller, constituting a "comparison" of the trade.

proceeds to fill out his receive ticket, confirming purchase of 100 shares of American Can at $139\frac{3}{8}$ from Miami Brothers, and also by the same ticket authorizing the Stock Clearing Corporation to receive for the account of his firm the stock at the price named (See Plate 22). This receive ticket is then dispatched to the Clearing House by messenger and within a few minutes is re-distributed, placed in the box belonging to Miami Brothers, and gathered up by their regular messenger, and is in their hands

as a confirmation of the transaction. Miami Brothers check up this comparison and hold the receive ticket for transmission to the Night Clearing Branch at the close of the day's business.

Exchange Tickets and Comparisons

We have previously seen that the rules of the New York Stock Exchange demand an exchange of comparison on every transaction within an hour and a half after the close on the day that such transaction has been completed on the floor of the Ex-

Form M+	No. <u>000</u>	Our Line Number <u>6</u>	New York <u>April 20</u> 19 <u>29</u>
STOCK CLEARING CORPORATION (NIGHT CLEARING BRANCH)			
RECEIVE FROM <u>Miami Brothers</u>			
<u>100 shares American Can. @ 139 3/8 \$ 13,937.50</u>			
for account of the undersigned.			
Their Line Number <u>61</u>		LELAND & CO. 000	

PLATE 22. BUYER'S RECEIVE TICKET

Made out (not in duplicate) by the buyer (Leland & Company) and sent to the seller (Miami Brothers) for transmission to the Stock Clearing Corporation. Not only one portion of the "comparison," therefore, but also a Clearing House order.

change.¹ It has also been ruled that "an exchange of tickets, made in the manner required by the By-Laws and Rules of the Stock Clearing Corporation, shall constitute a comparison."²

Thus, throughout the entire day, the Clearing House is serving as a central distributing station for these double exchange slips, which are exchanged constantly on every transaction made on the New York Stock Exchange, whether in a cleared, or "regular," stock, or in a non-cleared, or "ex-clearing," stock. In the case of ex-clearing house issues, we have seen that comparisons must be likewise exchanged. We shall see later³ how these

¹ See Chapter V, p. 89.

² Rules of the Governing Committee of the N. Y. S. E., Chapter II, Sec. 2.

³ See Chapter VII, p. 133.

comparisons are made out in triplicate by the seller and exchanged with the buyer. Exchange slips are constantly being received, distributed into the individual boxes of the brokerage houses to whom they are addressed, and steadily passed out to the messengers of such brokerage houses, as they call for them and the other contents of their boxes. So the messenger of Leland & Company receives his confirmation of sale from Miami Brothers while the latter's messenger receives confirmation of purchase from Leland & Company.

The Stock Clearing Corporation keeps no records of these exchange slips as they pass through its hands during centralized distributing. Such records must be carefully kept by the brokerage houses themselves. As transactions in cleared issues are made the brokerage house clerk enters them upon his firm's clearance sheet for that particular day, taking care to check all such entries with his dispersal and receipt of the exchange tickets. If any slip-up should occur, which very seldom happens, the matter is immediately adjusted, usually over the telephone, and both firm's records are brought quickly into consonance, either by cancellation, purchase or sale.

The Night Clearing Sheet

The night clearing sheet carries the record of both purchases and sales of all cleared stocks, since the primary function of the record, as a part of the clearing system, is to cancel out sales and purchases of identical issues, thus effecting the fundamental savings in time of delivery and receipt of securities and payments. On the left side of the clearing sheet are recorded all purchases, as stocks and amounts "to receive." On the right side are entered all sales, as stocks "to deliver."

At the close of the day, therefore, the clearing sheet shows a record of all cleared stock trades made by the firm on that day. By cancelling out the exchanges which balance each other, a series of items is arrived at as the "Balance to Deliver," and another series as the "Balance to Receive."

For instance, if the clearing sheet, when it is completed shortly

STOCK CLEARING CORPORATION (NIGHT CLEARING BRANCH) NO. 000 1st CK K.H. 2nd CK H.E.C.									
OFFICE ADDRESS 115 Broadway CLEARING SHEET OF LELAND & CO.									
RECEIVE FROM	SHARES	SECURITY FIRM NAME & ADDRESS OF ISSUING INSTITUTION	PRICE	VALUE	DELIVER TO	SHARES	SECURITY FIRM NAME & ADDRESS OF ISSUING INSTITUTION	PRICE	VALUE
1 Brooks & Co.	200	Radio	94 1/4	18,850.00	51 Williams & Smith	300	Steel	18 1/8	5,433.750
2 Penachue Bros.	500	Steel	18 3/8	9,068.750	52 Munton & Munton	100	Radio	93 7/8	9,387.50
3 Carters & Co.	300	Can	141 7/8	4,256.250	53 Strauss & Goldstein	200	Can	13 9	2,780.00
4 Underwood & Brown	100	Radio	94 3/4	9,475.00	54 Stevenson Bros.	100	Can	13 9/16	1,392.50
5 Folwell & Co.	200	Steel	180 1/2	36,100.00	55 Calhoun & Hardy	300	Radio	95 1/8	2,853.750
6 Miami Bros.	100	Can	139 3/8	13,937.50	56 Wallace & Co.	200	Radio	94 3/8	1,887.50
7 Folwell & Co.	300	Steel	180 1/8	54,262.50	57 Underwood & Brown	200	Steel	18 1/4	3,630.00
8 Munton & Munton	100	Can	139 1/2	13,950.00	58 Kraft Bros.	100	Steel	18 1/4	1,812.50
9 F. H. Camel	300	Radio	93 7/8	28,162.50	59 Norman & Norman	400	Can	140 3/8	56,150.00
10					60				
11					61				
12					62				
13					63				
14 Calamici To Silver	200	Can	140	28,000.00	64 Calamici To Silver	400	Steel	18 1	72,400.00
15					65				3,358.750
16					66				
17					67	Check			1,500.00
18					68				
19					69				
20	2	300		3,358.750	70				3,358.750
21					71				
22					72				
23					73				

PLATE 23. THE NIGHT CLEARING SHEET

Sample sheet made out by clearing member and sent to the Night Branch after the close of each day's business, listing all trades in regular, or cleared, stocks, and cancelling purchases and sales in identical issues.

after close of the day's business, shows that Leland & Company sold a total of 600 shares of Radio Corporation common stock that day and also bought the same number of shares, both sides of the sheet will balance in this particular issue and Leland & Company will not have to receive or deliver any Radio common in balancing up that day's trading.

Balances to Receive and Deliver

Let us assume that this is the case. Let us also assume that the firm has sold a total of 600 shares of United States Steel common stock during the day and has likewise bought 1,000 shares of Steel common. In this case 400 shares more of Steel have been bought than have been sold, and at the bottom of the clearing sheet, therefore, will appear the balancing entry, "Balance to Receive 400 Steel," since the firm will have to receive that amount of Steel common in order to keep its inventory of Steel stock corresponding with its actual transaction balances for the day.

Let us again assume that the firm has sold a total of 700 shares of American Can common stock during the day's trading and has bought a total of 500 shares of Can. The balance therefore indicates that Leland & Company have sold 200 shares more of Can than they have bought and must therefore deliver that balance of stock on the following day in order to keep their inventory of American Can stock corresponding with the actual transaction balances. The additional balance entry at the bottom of the day's clearing sheet, therefore, will be "Balance to Deliver 200 Can."

The above transactions are probably not all the business that Leland & Company have done that day. They have bought and sold quite a number of stocks listed on the New York Stock Exchange which are ex-Clearing House issues.¹ Since such issues are not cleared by the Corporation they do not appear on the clearing sheet and are not handled by the Night Clearing Branch. The Day Clearing Branch, however, will handle exchange of

¹ See Page 94.

such stocks, with resultant exchange of money, before 2:15 P.M. of the following day, and will thus "settle" for the stocks, even though they are "ex"-stocks and cannot be cleared by the Night Branch.

The Price Element

Thus far we have considered only the volume of Leland & Company's stock transactions, as entered on the clearing sheet. It is just as important, of course, that a record appear of the prices at which the various transactions in the cleared stocks have been made in order that the balance of funds received for stock sold and paid out for stock bought may correspond exactly with the firm's bookkeeping records.

Besides entering the name of the other firm involved in the transaction and the amount of stock, therefore, the clearing sheet carries the price at which the transaction was effected and the total value of that transaction, resulting, of course, from multiplying the price by the number of shares involved. The resulting value of each transaction is entered, therefore, and these important columns on the night clearing sheet are called the "cash extensions."

If Leland & Company had sold the same number of shares of stock in the same companies as they bought during the day, there would have been no balance of stock to deliver and no balance of stock to receive for that day. Likewise, if the prices of such stocks sold had been just the same as the purchase prices of the same kind and amount of stocks purchased, there would be no difference between the amount of balance of money to receive and the balance of amount of money to deliver and the cash extensions would also balance.

In this particular case, however, there is a balance to deliver of 200 Can and a balance to receive of 400 Steel. This makes the totals of actual stock volume exchanged for the day balance exactly. But the cash extensions do not thus balance, until we have injected some more figures and done a little more bookkeeping. It is clear that before the cash extension columns can

be brought into balance, the balance of stocks to receive and deliver must be given a cash extension and therefore a price.

The Delivery Price

But Leland & Company do not know as yet to whom the 200 shares of Can must be delivered the next day, nor do they know from whom they are going to receive their 400 shares of Steel. It would be impossible to set an exact price on these balances without consulting the records of the Night Clearing Branch which will not be available until many hours later. Some method must be found, therefore, whereby a price may be given to these balances to receive and deliver. Through the medium of the Clearing House the total volume of stocks exchanged will balance itself during the night. So also, through the medium of the Clearing House, the total cash value of the stocks exchanged will balance itself during the night.

It is only necessary that all Clearing House members calculate the value of their balances to receive and deliver on the same exact price basis. Then the minor adjustments which each one makes to balance his own clearing sheet will cancel each other out during the night. The Night Clearing Branch of the Stock Clearing Corporation, therefore, sets a "delivery price" upon each individual "cleared" stock issue which has sold on the Exchange that day. The delivery price is fixed just after the close of each day's market. It is an arbitrary figure but is generally the nearest even figure to the closing bid price for the day. For instance, if the closing quotations on the floor of the Exchange for American Can common stock were $140\frac{3}{8}$ bid, $140\frac{1}{2}$ asked, the delivery price for Can on that day would probably be arbitrarily fixed at 140.

How It Works

Let us now go back for a moment to our fundamental illustration of the savings brought about by stock clearance. We remember that Aaron & Company sold 100 shares of Steel com-

mon to Burton & Burton, who sold the same amount of Steel to Castel & Company, who in turn sold the same amount of the same stock to Disque Brothers. Instead of three separate deliveries of this block of 100 Steel common, all down the line, the clearing system provides that all three of the transactions may be settled merely by the delivery of the 100 shares of Steel by Aaron & Company to Disque Brothers. But the "cash extensions" are not so simple. Suppose Aaron & Company sold to Burton & Burton at a price of 179; Burton & Burton sold to Castel & Company at 180 and Castel & Company sold to Disque Brothers at 181. When Aaron & Company deliver their 100 shares of Steel to Disque & Company they will receive the price Disque & Company paid, which is 181, even though Aaron & Company's selling figure, in the cash extension column of their clearing sheet, is based on a price of 179, the price at which they sold to Burton & Burton. Aaron & Company, therefore, received two points more than they deserve.

But Burton & Burton have a profit of one point and so have Castel & Company, even though they have not been forced actually to handle the physical stock certificate themselves. The actual prices on the books of these firms, and also on their clearance sheets, however, tell them exactly what they owe to, or are due to receive from, some other firm. Aaron & Company find they will receive two points, or \$200 more than their price calls for when they deliver the stock to Disque & Company, so they make out a check for \$200 in favor of the Stock Clearing Corporation. Meanwhile, both Burton & Burton and Castel & Company find they are due to receive one point, or \$100 each, in profit on their turnover, and they each make out a draft on the Stock Clearing Corporation for \$100. Thus the \$200 check of Aaron & Company is used to pay the two \$100 drafts of Burton & Burton and Castel & Company.

So far as the actual bookkeeping is concerned Burton & Burton would have a cash extension on the "receive" side of their clearing sheet of 100 times 179, or \$17,900, and on the "deliver" side the cash extension would be 100 times 180, or \$18,000. So far as this particular stock transaction is concerned there would be

no "Balance to Deliver," since the physical volumes of stock, each 100 shares of Can, cancel each other. But in order to balance the cash extensions, there would have to be an item on the receive side of \$100, to cover their profit on the transaction. This would be entered as, "Draft \$100," and would be credited to the account of Burton & Burton by the Night Clearing Branch. The same course would be followed by Castel & Company to balance their sheet.

Cash Extensions on Balances

We now see how the bookkeeping adjustments are made on the clearing sheet for cash extension items when there is no physical stock to be delivered or received. In the case of Aaron & Company, there will be an item on the deliver side of their clearing sheet, "Burton & Burton 100 Steel at 179 — \$17,900." In this particular transaction there is nothing on the receive side to balance this item and if this were the only entry for the day there would have to be a contra entry (strangely enough on the receive side, according to bookkeeping methods), "Balance to Deliver 100 Steel." This would be followed by the delivery price of Steel for that day's closing. Let us say it has been set at 181, for simplicity's sake. This gives a cash extension of \$18,100 and in order to make the \$17,900 on the receive side balance with this, Aaron & Company must add to it another item, "Check \$200." This is equitable because when they deliver the stock next morning Aaron & Company will receive for it the delivery price of 181, or \$18,100, which will be \$200 more than they should actually receive, according to the sale at 179 made to Burton & Burton.

In this particular example Disque Brothers will find that the delivery price fixed for Steel is exactly the same as the price at which they bought it from Castel & Company. Their "Balance to Receive 100 Steel at 181," with its cash extension of \$18,100, will, therefore, just balance their record of purchase of 100 Steel at 181, or \$18,100, from Castel & Company. Disque Brothers will therefore be "all square" with the Clearing House and will

need neither "check" nor "draft" to balance their clearing sheet and their bookkeeping accounts.

The check for \$200 from Aaron & Company, therefore, covers the two \$100 drafts of Burton & Burton and Castel & Company.

Importance of the Delivery Price

Now let us suppose, as might well be the case, that the delivery price of Steel on this particular day did not happen to be fixed at 181, the price at which Disque Brothers bought it from Castel & Company. Let us suppose that the market kept on advancing after our four firms had completed their trades and that the delivery price, set at the close for Steel, was 184.

What happens? Nothing different in the case of Burton & Burton and Castel & Company. They have no balance of Steel to receive or deliver in this transaction and simply draw on the Stock Clearing Corporation for \$100 each as their profit on the trade, without actual exchange of the physical stock.

But Aaron & Company, with a balance of 100 Steel to deliver, must use the delivery price of 184, or \$18,400. But they sold it to Burton & Burton for only 179, or \$17,900. The difference, to balance the two sides of their clearing sheet, will be a check to the Stock Clearing Corporation for \$500. This is equitable because when they deliver the stock to Disque Brothers the next morning they will receive the delivery price, or \$18,400, whereas their books call for receipt of only \$17,900 from the sale to Burton & Burton.

Likewise, Disque Brothers, with a balance to receive of 100 Steel, must also use the delivery price of 184, or \$18,400. But they bought the stock from Castel & Company for only 181 or \$18,100. The difference, to balance the two sides of their clearing sheet, will be a draft on the Stock Clearing Corporation of \$300. This is also equitable because when they receive the 100 shares of Steel from Aaron & Company the next morning, Disque Brothers will have to pay the delivery price of \$18,400, whereas their books call for payment of only \$18,100 for the purchase from Castel & Company.

Adjustments Balance to "Prove"

Once more the entire process balances up. The check for \$500 from Aaron & Company is used by the Stock Clearing Corporation to pay the drafts of \$100 from Burton & Burton, \$100 from Castel & Company and \$300 from Disque Brothers. The detailed explanation has perhaps been tedious and involved, but it is hoped that the reader can now understand this basic factor of clearing house bookkeeping. In practice, the adjustments work out just as evenly as in our examples, and the drafts presented by the various brokerage members of the Stock Clearing Corporation are exactly met by the checks which are received from other members.

On the rare occasions when the checks do not exactly equal the drafts, the Clearing House "fails to prove" in this one particular item. A special corps of expert accountants are held constantly in readiness for such emergencies. They quickly and methodically run down the error and if it is due to an error in reporting or making returns to the Clearing House by one of its member brokerage houses the firm is fined for such error. And no one leaves the Night Clearing Branch until all accounts have been thoroughly checked and found "to prove."

We have harked back to our example of the four Steel transactions because they presented a more simple situation in a single stock. Having learned from those transactions how the delivery price affects the balances due or payable on the clearing sheet by clearing members we may again return to the main office of Leland & Company, the New York agents of their Los Angeles office, and watch the Leland clerk complete the preparation of the day's clearing sheet.

We found that Leland & Company had a balance to deliver of 200 American Can common stock.¹ We have assumed that the delivery price for the day is set at 140. The cash extension is simple. The firm also has a balance to receive of 400 shares of United States Steel common stock. We shall assume that the

¹ See Page 101.

delivery price on Steel has been set at 181. Here again the cash extension is simple arithmetic.

We saw how such delivery prices can distort the actual bookkeeping figures of a brokerage firm in our previous examples of the four houses trading in Steel. They adjusted such differences, as well as profit or loss on the turnover of stocks which cancel themselves out, by a simple bookkeeping process of balancing the two sides of their clearing sheet.

Back to the Original Example

In the case of Leland & Company we find that the actual amount to be received from the total of stocks sold, but cancelled out by purchases together with stock to be received on balance, is \$150 smaller than the actual amount to be paid out on stocks bought but cancelled out by sales, together with payment to be received on the balance of stock to be delivered. In order to balance the clearing sheet, therefore, Leland & Company enter an additional item, "Check \$150," and attach such check to the clearing sheet when it goes to the Night Clearing Branch of the Stock Clearing Corporation shortly after the close of the market on this particular day of trading. This check will also balance the firm's own books since without it they would have received for that day's business \$150 more than was called for by the actual cash extensions of their transactions. The clearing sheet now balances with a total physical trading volume of 2,300 shares, each way, and cash extensions of \$335,987.50 for the day's business.

Stock Loans on the Night Clearing Sheet

It is also customary to enter on the stock clearing sheet any receipts or deliveries of stock arising from the borrowing or lending of stock certificates among brokers who are members of the Clearing House. In such case the stocks are entered in exactly the same way as if the stocks had been bought or sold, cash extensions and adjustments are made in the same way and the

process is identical. In fact, it is impossible to tell from the clearing sheet whether the stocks entered are the result of actual exchanges or of loans. The matter of borrowing and lending stocks between brokers will be treated more fully in the chapter on "short selling."¹

We have now completed the preparation of the clearing sheet for Leland & Company. The messenger takes it, along with the check, to the Clearing House. He also takes the exchange tickets which the firm has received as comparisons during the day from the firms represented by the transactions on the sheet. He also takes a deliver balance ticket guaranteeing delivery to some broker yet to be determined of 200 shares of American Can at the delivery price of 140, and a receive balance ticket stating that Leland & Company will receive from some broker, yet unnamed, 400 shares of Steel at the delivery price of 181.

The Night Clearing Branch in Action

These are the materials with which the Night Clearing Branch works. Approximately 400 employees gather every evening and are ready to tackle these reports by 7 P.M. If all goes well and the day's market has been a small one, they may "prove" and go home as early as 10 P.M. If the market has been heavy or if there are troublesome errors, the haggard employees may slink into their beds long after the day clerks have arisen to go about their duties. During the Stock Panic of 1929, the regular force was increased by trained reserves, and work of clearance was not completed until the following morning, but even under this great strain the Clearing House machinery functioned in creditable manner.

There are many more technicalities to the work done by the clerical forces of the Night Clearing Branch but it is only necessary to understand their main purpose. The time-saving principle of stock clearing has largely been done by the clerks who make out the clearing sheets. There are left only balances of physical stock to deliver and receive. These are represented by

¹ See Chapter IX, p. 172.

the deliver and receive balance tickets. It will be recalled that they have been filled out in blank. Leland & Company know that they will have to deliver 200 shares of American Can stock at 140 in the morning but they do not know to whom. That is the business of the Night Clearing Branch. Leland & Company also know that they must receive 400 shares of United States

STOCK CLEARING CORPORATION (NIGHT CLEARING BRANCH)			
THE UNDERSIGNED WILL DELIVER ^{THE} FOLLOWING BALANCE OF STOCK AT THE DELIVERY PRICE.			
SHARES	STOCK	DELIVER TO	
200	HC @ 140 -	Burton & Burton	200
DATE <u>4/20/29</u>		NAME LELAND & CO. No. 000	

PLATE 24. DELIVER BALANCE TICKET

Leland & Company make out this ticket, without the name of the receiving firm, from their Night Clearing Sheet. The Night Clearing Branch "gives it the name" of Burton & Burton, and returns it to Leland & Company.

Steel common stock at 181 from some other broker the following morning but they do not know from whom. That is likewise the business of the Night Clearing Branch.

It is readily apparent that there will be the same total number of shares to be delivered in any one stock by the clearing members as there will be total number of shares to receive by the clearing members in that stock. For every transaction on the New York Stock Exchange there must be both a buyer and a seller. Therefore, in the stocks cleared by the Stock Clearing Corporation the total of all member balances in any individual stock to deliver will exactly equal the total of all balances to receive in that particular stock. The process is merely one of listing and

arranging all balances according to each individual stock issue and then balancing the shares to deliver with the shares to receive.

The Allotment Sheet

For this purpose each cleared stock issue is assigned an "allotment sheet," and as the clearing sheets are gone over each balance to receive or deliver Steel, for instance, is transferred to the

Form M8 STOCK CLEARING CORPORATION (NIGHT CLEARING BRANCH)			
THE UNDERSIGNED WILL RECEIVE THE FOLLOWING BALANCE OF STOCK AT THE DELIVERY PRICE.			
SHARES	STOCK	RECEIVE FROM	
400	X@181	Aaron & Co.	300
		Disque Bros.	100
DATE 4/20/29		NAME LELAND & COMPANY, No. 000	

PLATE 25. RECEIVE BALANCE TICKET

Leland & Company make out this ticket, without the name of the delivering firm, from their Night Clearing Sheet. The Night Clearing Branch "gives it the names" of Aaron & Company, and Disque Brothers, and returns it to Leland & Company.

Steel allotment sheet with the name of the broker involved. When the clearing sheets have all been gone over the balance of Steel to deliver will exactly equal the balance of Steel to receive by all brokers concerned.

The Steel allotment clerk finds that Leland & Company must receive 400 Steel. He probably will also find that some other firm, perhaps our old friend Aaron & Company, is down to deliver 400 Steel. He then directs Aaron & Company to deliver

their 400 Steel to Leland & Company. Or he may find that Aaron & Company are down to deliver only 300 Steel. But he also finds that our other old friend, Disque Brothers, is also down to deliver 100 Steel. He therefore directs Aaron & Company to deliver their 300 shares to Leland & Company and directs Disque Brothers to deliver their 100 shares also to Leland & Company, thus insuring that Leland & Company will receive their full due of 400 shares of Steel on the following day.

“Giving a Name”

This process of the allotment clerk in directing the delivery of balances is called “giving a name” to the deliver and receive balance tickets. We have previously noticed that these tickets are turned in to the Clearing Corporation with a blank space for the name of the firm to which our house will deliver or from whom it will receive its balances. The allotment clerk fills in these blank spaces and thus “gives a name” to the slips. They are then returned in the morning to the originating house, and receipts and deliveries must be completed by 2:15 P.M. that day.

Leland & Company will expect to receive, let us say, 300 shares of Steel due the firm from Aaron & Company, and 100 shares from Disque Brothers. Leland & Company will also find that they are directed to deliver their 200 shares of American Can, let us say, to Burton & Burton. In the former case they will be prepared to make payment for their stock to such delivering firms, at the delivery price of the previous evening. In the latter case they will expect to receive payment for the stock which they deliver, also at the delivery price set the night before.

Such physical deliveries of stock on balance for cleared, or regular, issues, all deliveries of ex-clearing issues and all payments are made through the Day Clearing Branch of the Stock Clearing Corporation. The Night Clearing Branch has now completed its work and gone home. The work of the Day Clearing Branch is about to begin.

CHAPTER VII

THE DAY CLEARING BRANCH

The Night Clearing Branch as a Background

In the preceding chapter we became familiar with the activities of the Night Clearing Branch of the Stock Clearing Corporation. We saw how this efficient organization saves an almost unbelievable amount of time, energy, banking accommodation and possible inaccuracy by cancelling out against each other the trades made by its members in individual stock issues and thus necessitating the exchange only of the balances of such stock trades instead of direct physical exchange of stock for every transaction entered into.

In Chapter V we studied the economic advantages of the clearing house system which led to its institution and development. We saw how at first the clearance system was applied only to the physical exchange of security issues, but how later the clearing principle was extended to cover also the exchange of money and credit which must needs accompany the exchange of physical securities on balance. We also noted how the original clearing system of physical security exchanges was retained in the new Stock Clearing Corporation under the Night Clearing Branch, while the new cash clearance system was instituted as the Day Clearing Branch.¹

In our study of the operations of the Night Clearing Branch in the preceding chapter we found that at the close of such operations each clearing member was informed in the morning to whom he was to deliver his stock balance to deliver and from whom he was to receive his stock balance to receive, as a result of transactions in regular, or cleared, stocks, during the previous day's trading. Even if the clearing members were forced to draw

¹ See Page 92.

their checks for the payment on receipt of the stock balances which they had to receive, as in the old direct method, the Night Clearing Branch would still have saved a tremendous amount of labor. But through the instrumentality of the Day Clearing Branch an even greater saving of labor, time and credit is obtained.

Savings by Clearing Money Payments

To take a simple instance we may go back once more to our friend Leland & Company who we found, as a result of the Night Clearing Branch's operation, had a balance of 200 shares of American Can common to deliver to Burton & Burton at the delivery price of 140, involving receipt from the latter company of \$28,000. Likewise we found that Leland & Company might expect to receive from Aaron & Company 300 shares of Steel at the delivery price of 181 and for which it would have to pay Aaron & Company \$54,300. Leland & Company would also receive from Disque Brothers 100 shares of Steel at the same delivery price and would have to pay Disque Brothers, upon receipt of the stock, \$18,100.

Under the old system of clearing merely the physical stock balances, Leland & Company would have to receive \$28,000 and disburse \$54,300 and \$18,100 during the day, as a result of stock deliveries and receipts. The function of the Day Clearing Branch is to act as central clearing house for these cash payments and receipts. Thus instead of receiving \$28,000 and paying out \$54,300 and \$18,100 Leland & Company simply appoint the Stock Clearing Corporation as their agent to manage these cash transactions. Their receipt of \$28,000 cancels all but \$44,400 of their disbursements. Credit necessary is reduced by the amount of \$28,000, separate trips to different banks for certification of the necessary checks are dispensed with and again is effected a tremendous saving in time and credit.

The example cited above is a simple one and does not illustrate the savings involved as well as a more complicated illustration might. When it is considered that Leland & Company might

easily have a total of 50 different stock security issues to receive and make payment on, involving 15,000 to 20,000 shares of stock and an aggregate payment of perhaps as high as \$2,000,000, the saving involved in the cash clearance system is more readily apparent. The firm's payments, as well as receipts, are all centralized at the Clearing House, the use of individual checks is abrogated, except for balances, and the credit involved in making the \$2,000,000 payment for stocks received may be even more than cancelled out by receipt of credit from stocks delivered.

Day Branch has Wider Scope

The Day Branch of the New York Clearing Corporation is much more embracing in its operation than is the Night Clearing Branch. We have seen that the Night Branch clears only a limited selection of stocks and bonds. The Day Clearing Branch started out in this way, settling payments only for certain lists of stocks. Gradually, however, its field has been widened until today it handles the settlement for all full-lot stock and bond transactions on the New York Stock Exchange, for its members, whether such stocks and bonds have gone through the clearing house facilities of the Night Branch or not.

The gap between the two branches is closed by a combination of the records which the Day Branch receives from the Night Branch and also from the brokerage house members themselves, at the start of the day's business. From the Night Branch come its various useful records, chiefly the night clearing sheets, which we have noted were made up the day before by the brokerage house members and served as the material for operation of the Night Branch. The Night Branch has presumably "proved" total transactions in cleared stocks, has balanced checks and drafts, and passes on to the Day Branch the summary of such items cleared, with balances to receive and deliver and their cash extensions.

If the Night Branch does not prove by a reasonable time in the morning, it works on, but the work of the Day Branch cannot be held up so the regular records are forwarded as usual, with the

additional notice of its failure to prove, the amount out and other details. Quite often the Day Branch will be able to find the error, as its own work progresses, before the Night Branch does so. Needless to say, the error is almost always the fault of one of the member brokerage houses, which are fined for such errors.

The Raw Materials

The Day Branch also "proves" by balancing the cash extensions of items to receive and deliver, as reported from the Night

Form 65-9-29-10081		STOCK CLEARING CORPORATION (DAY BRANCH)				Stock Clearing Corporation DAY BRANCH			
No. <u>000</u> (Clearing Member)		Contingent Debit List for value of Security Balance orders to Receive as per Night Clearing Sheets dated <u>APRIL 20, 1929</u>				STOCKS Failed to Receive Total value of which credit to our account.			
No. of List... <u>3</u>		Stamp Name of Member <u>BURTON & BURTON</u>							
Blotter Line No. Receiving Member	Receive from	No. of Shares	Stocks	Price	Value Stocks	Failed Stocks	Value Failed Stocks		
1									
2	<i>Leland & Co.</i>	<i>200</i>	<i>Am. Can</i>	<i>140</i>	<i>28 000</i>	<i>—</i>			
3									
4									
19									
20					<i>28 000</i>	<i>—</i>			

Drafts on Acct.					Member enters total only. Make no other entries below last heavy line.	Added by <i>Mc</i>	Signature of Clearing Member _____ All spaces below Totals (heavy line) for use of B. C. C. only.
Actual Balances						Checked by <i>S.A.</i>	
Actual Non-Cld.						Headed by <i>Wolke</i>	
Loans							
" Between Members							
Drafts Due							
Total							

PLATE 26. CONTINGENT DEBIT LIST FOR REGULAR STOCKS

The Night Clearing Branch has ordered Leland & Company to deliver their balance of 200 Can to Burton & Burton. The latter must pay for this stock, through the Day Clearing Branch, and therefore enter it on this sheet which they send to the Clearing House. (See also page 130.)

Branch. From those Night Branch reports the Day Branch receives contingent lists for each clearing member. A contingent debit list is furnished by each member house itself, consisting of a list of securities which it is to receive during the day and also

a contingent credit list of securities which it will deliver, excepting deliveries made through the central delivery department. The lists for cleared stocks are made up from the returned directions of the Night Branch and must be at the offices of the Day Branch not later than 10 A.M. The lists for non-cleared stocks are made up from the exchange tickets, which must accompany them, and must be in by 10:30 A.M.

Physical Make-up

Each member of the Clearing House association has its own official number and this number must appear on all of its forms to the Clearing Corporation. In the offices of the Day Branch, located underneath the floor of the New York Stock Exchange, are 11 cages, not unlike the tellers' cages in a bank. Previously there were 10 cages, each cage handling 60 member accounts, up to 600. More recently, the addition of new clearing members has made it necessary to add an additional cage, so that there are now 11 cages, each still handling 60 accounts, or a total of 660 accounts.

During the process of delivering and receiving securities, settling for such operations and clearing such settlements, the Day Branch of the Clearing House operates as the agent of each clearing member. The "books" of each member are kept in one of these 11 cages and all memoranda relating to debits and credits find their way swiftly to the particular cage in which the member's account is kept.

At the beginning of the Day Branch's day, therefore, the clerks in the various cages have an advance record of just what operations each clearing member is scheduled to perform during the day. These are the contingent credit and debit lists which we have previously mentioned, from which is also made up a summary control sheet. As the cage in which each member's account is kept receives notice of that firm's delivery of stock, a contingent credit item becomes an actual credit item on the firm's books with the Clearing House. As the cage receives notice of receipt of stock a contingent debit switches to an actual debit

on the Corporation's books for that firm. Thus, throughout the day, until 2:15 P.M., delivery and receipt of securities is going on between members of the clearing association, and as such operations are completed each member's account is being credited and debited accordingly in its particular cage of the Stock Clearing Corporation.

At the close of the day's operations, normally soon after 2:15 P.M., each firm's total contingent debits should be actual debits, and its total contingent credits should be actual credits. In practice, various allowances must often be made for "failure to deliver," but the observation is accurate in theory, at least.

Control Records

Thus each individual member firm has its own "control" sheet, which will show, at any time during the day's operations, just what state the firm's account is in with the Stock Clearing Corporation. As this process is going on, the member's status is constantly changing as regards net credit or debit, and it is highly important that its debit shall not run too far ahead of its credit. Careful check is made all during the day by the clerk in each member's cage, through the control sheets and a sort of informal work pad which the clerks familiarly term a "slate."

If the clerk finds that any firm's debits are running too far ahead of credits, that is, if the firm is slow in its deliveries of stock balances to deliver, steps may be taken to call attention to the fact and hurry up deliveries, or the Clearing House may demand additional cash or credit from the firm to reduce its debit margin.

It is apparent that during various periods of the day, during deliveries and receipts of stock balances, a clearing member is quite often using the credit afforded him by the Stock Clearing Corporation. The amount of such credit which the firm is using is always apparent on both its record and slates, as the amount by which its debits on stock received exceed its credits on stock delivered.

Controlling Credits and Debits

This balance of credits and debits is the crux of the whole cash clearing system. It may well be considered even one of the highest points of the whole stock exchange system. For at this point in the whole process of buying and selling securities actual money is being transferred. The rest of the process of trading is bargaining, making contracts and general preparation for this important exchange of actual cash or credit.

In effecting the clearance of such interchanges of stock and money, therefore, the Stock Clearing Corporation is simplifying a task but it is not reducing its importance and the Corporation takes special care, therefore, that no one firm shall over-extend its credit. And right here, in the extension of such credit, when a firm receives stock faster than it delivers, the Stock Clearing Corporation performs one of its chief functions. It does away with actual payment for stock delivered by check and thus obviates the necessity for a tremendous amount of checking, certification and individual use of bank credit.

When and while a clearing firm's debits run ahead of its credits, the Stock Clearing Corporation is actually financing that individual firm. The amount of credit which the Stock Clearing Corporation is willing to lend the firm is entered each day at the top of the firm's record sheet and is based upon the sum contributed by that firm to the stock clearing fund. That contribution, in turn, is based upon the firm's requirements, or the amount of business which it normally transacts in any one day's trading. The minimum contribution is \$10,000. The total clearing fund amounts to nearly \$15,000,000 and members are liable to an additional assessment of 100 per cent., giving the Stock Clearing Corporation a reservoir of credit amounting to around \$30,000,000.

Closing the Day

Since all stock deliveries on balance for the previous day's trading are to be made by 2:15 P.M., all clearing member ac-

counts can normally be closed by the Day Clearing Branch shortly after three o'clock, though after days of heavy trading it may be much later. All contingent credits are now actual credits. All contingent debits are now actual debits and each clearing member's final account for the day shows either a credit or a debit balance with the Stock Clearing Corporation.

Form 023-9-29-66,000

STOCK CLEARING CORPORATION
(DAY BRANCH)

Clearing No. 000 New York, April 21, 1929 192

Firm Name LELAND & CO.

We herewith send ~~Check~~ Credit Memorandum for \$ 44,400 which ~~Credit~~ Debit to our account.
Deliver the following for which we hereby acknowledge receipt.

PLATE 27. THE FINAL RECEIPT

During the day Leland & Company have received 400 Steel at 181 and owe \$72,400. They have delivered 200 Can at 140 and are credited \$28,000. They owe the Stock Clearing Corporation, therefore, a balance of \$44,400, which is taken care of by their check attached to this Final Receipt.

If the firm has a debit at the close of the day it will forward its check for that debit to the Stock Clearing Corporation before the end of the day. If the balance is a credit the Stock Clearing Corporation will expect to pay the firm's draft for that balance of credit. Thus, once more, since each seller has a buyer and each deliverer of stock balance has a receiver of stock balance at equal delivery prices, the checks received by the Stock Clearing Corporation will exactly balance and meet the drafts made upon it.

The Final Receipt

This final balance is noted on the "final receipt" made out by each clearing member at the end of the day (See Plate 27). It is so formulated that by crossing out either the words credit or debit memorandum, the firm can record its payment by check

for its debit balance or record receipt of payment on its draft for the credit balance due from the Stock Clearing Corporation. The final receipt form is made out in duplicate, one part being retained by the brokerage clearing member and the other forwarded to the Stock Clearing Corporation along with the firm member's check or draft. If securities are to be received they are listed on this final receipt, which also becomes a receipt for those collateral securities.

We have now followed the bookkeeping system of the Day Clearing Branch as deliveries and receipts are going on from 10 A.M. until 2:15 P.M. We have noted that the credits and debits on the record sheets of each clearing member are entered as the Stock Clearing Corporation receives confirmation that deliveries of the individual stocks have been completed.

Physical Delivery of Stock Between Brokers

But we have yet to observe how those confirmations of delivery originate and the various methods of making physical delivery of the securities themselves. Until a few years ago all stocks had to be, and even now ex-clearing stocks must be, delivered directly between the two commission houses involved, wherein the Stock Clearing Corporation takes no direct part and figuratively sits back and waits until it has received due notice that the two firms involved have completed their exchange of stock. This is called the direct method of delivery and will be discussed more fully later in this chapter.¹

From a purely logical standpoint, it must previously have seemed strange that the Stock Clearing Corporation, offering the unquestioned advantages of the clearing house principle for so many details of stock transactions, should sit idly by and make the commission houses deliver their securities direct to one another's offices, when it would seem much more simple to make delivery to one another at the central office of the Clearing Corporation, just as has long been done with comparison slips, exchange slips, etc.

¹ See Page 136.

• The Central Delivery

It was not so simple a task as might be imagined, however, for the Clearing House to extend its facilities for central delivery of securities, and this development has been a fairly recent one. Early in 1929 operations of the central delivery system were begun with only a few stocks in the new branch of the Stock Clearing Corporation built for this express purpose in the basement under the floor of the Exchange, in the corner bordering on Wall and Broad Streets. Strangely enough, the brokerage fraternity itself, as has often been the case in the past, was somewhat skeptical and loath to accept this new and tremendous saving of time and energy provided for its members by the Stock Clearing Corporation. The idea had almost to be "sold" to the commission houses, who were somewhat jealous of this final and highly important aspect of security settlement, which had previously been left to them directly, without the offices of the Clearing House.

Partly to overcome this backwardness of the commission houses themselves, and partly to familiarize partners, clerks and messengers with the methods of operation in the new departure, the Stock Clearing Corporation carried on a campaign of propaganda and education for some time, largely through the medium of motion picture lectures. When the day came for opening of the new central delivery system all persons concerned, especially the messengers employed in delivery and receipt, were perfectly familiar with the plan and knew just how to go about their duties. There was order and system from the very inception of the operation.

Partly to insure such order, but chiefly to test practically its new machinery under a small load, the central delivery system began to function in only sections of the list of regular stocks traded at first. Such sections were selected alphabetically, until within a comparatively short time most of the active and important regular, or cleared, security issues listed on the New York Stock Exchange were handled through this central delivery system. The system functions, however, only for "regular" stocks,

or for delivery of balances cleared through the Night Branch. In 1929, a small list of convertible bonds was also given clearing privileges and deliveries are made through the central delivery system.¹

We have previously seen ² that at the beginning of the new day, each commission member of the Clearing House association must forward to the Day Branch lists of its contingent debits, or stocks to be received by it during the day, and also lists of its contingent credits, or stocks which it will deliver during the day. We have also noted one exception, however — that no contingent credit list need be submitted for regular stocks to be delivered through the central delivery system. The Day Branch has such records available from the report of the Night Clearing Branch, in these regular or cleared stocks, but no check is usually made of these lists, since they are credits and will take care of themselves. The Day Branch is chiefly interested in debits, since therein lies the danger of the members overdrawing their accounts.

Central Delivery Ticket

With every physical security certificate for a regular, or cleared, issue which is to be delivered through the Clearing House, the delivering member makes out and attaches a three-way, or triplicate, delivery ticket (See Plate 29), as well as a collective delivery ticket (See Plate 28), also made out in triplicate, and listing all of the individual securities being delivered as a result of the directions received from the Night Branch. The collective delivery ticket, therefore, lists the individual securities for each one of which an individual delivery ticket has also been made out.

The delivering firm dispatches the actual securities, with individual delivery tickets and the collective delivery ticket, to the particular cage called for by the member's clearing number. Just as we saw ³ that there were 11 separate cages to care for the total membership of the Stock Clearing Corporation, according

¹ See Chapter VI, p. 94.

² See Page 116.

³ See Page 117.

to division by each firm's clearing number, in keeping the firm's books and settling their cash balances, so there are also 11 cages, similarly, in the central delivery branch, both on the receiving and the delivering side. As previously noted, each cage handles 60 accounts. If the member's number is from 1 to 60 his messenger transacts his business at the first window; if the number is from 61 to 120, he goes to the second window, and so on.

Stock Delivery to Clearing House

The messenger of the delivering firm therefore deposits his securities for delivery, with the delivery tickets attached, and the collective delivery ticket with the teller at his correct window in the central delivery branch, between 10 A.M. and 2:15 P.M., the latter being delivery time or the latest hour before the firm's "failed to deliver" becomes official. The receiving teller checks each individual security, for count only (not for good delivery, etc.), with the list as called for on the collective delivery ticket. This latter ticket, as we have seen, is made out in triplicate. It shows the firm to whom delivery is being made, the amount, the security, the delivery price and the cash extension.

When the clerk has checked the collective delivery list and found it to be correct, he stamps all three copies, tears off the third copy and returns it to the messenger of the delivering firm, as his receipt for the total delivery. The delivering messenger returns to his office with this receipt. Number one copy of the collective delivery ticket, properly signed by the delivering member, is retained in the member's cage for the record of the central delivery department.

The second, or remaining, copy of the collective delivery ticket is the most important one of the three for this is the ticket that actually gives the delivering member credit for such delivery with the Stock Clearing Corporation. This copy, stamped and signed by the receiving teller in the central delivery department, is immediately routed to the cage where the delivering member's account is kept. This collective delivery ticket is now equivalent

to the firm's contingent credit list, and it is thus apparent why such a list is not demanded from the firm at the beginning of the day, with respect to securities which are to be delivered through the central delivery department.

STOCK CLEARING CORPORATION (DAY BRANCH)						
Delivery Between Members Through Central Delivery Department						
Credit List for value of Security Balances Delivered as per Night Clearing Sheets Dated <i>April 20, 1929</i>						
Collective Delivery—All Items on this List must be Delivered.						
No of List						
2 LELAND & CO.						
Name and Clearing Number of Delivering Member						
	Deliver to	Shares Stands	Security	Price	Value	
1						
2	<i>Burton & Burton</i>	<i>200</i>	<i>Am. Can</i>	<i>140</i>	<i>28 000</i>	<i>-</i>
3						
18						
19						
20						
Credit the Total Amount to the Account of the above Delivering Member.				Total Amount	<i>28 000</i>	<i>-</i>
2				Added by <i>H.B.</i>		
				Checked by <i>R.R.</i>		
				Re-added by <i>Er</i>		

PLATE 28. THE COLLECTIVE DELIVERY TICKET

Which lists all stocks being delivered through the Central Delivery and is attached to the stock certificates. Made out in triplicate. The Central Delivery receives the certificates, checks them against this list, stamps the list and separates the three copies. Copy 1 is retained at the Central Delivery for record. Copy 2 (shown here) goes to the delivering member's cage for his credit. Copy 3 is returned to the delivering messenger as receipt for delivery.

Establishing Credit for Delivery

This collective delivery ticket shows the total amount of contingent credit, and as soon as it is received in the member's cage it becomes an actual credit on that firm's books in account with

the Stock Clearing Corporation. And here the tremendous savings of the new system are apparent. Previously, and through the direct delivery system, the delivering firm, Leland & Company (to go back to our example), with perhaps 100 different securities to deliver to perhaps 100 different stock exchange members, would have been forced to dispatch messengers on all those

072-5-23-500M		CHARGE TICKET			
Delivery Between Members, Through Central Delivery Department					
LELAND & CO 000					
Name and Clearing Number of Delivering Member					
STOCK CLEARING CORPORATION					
(DAY BRANCH) New York <i>April 21, 1929</i>					
NAME OF RECEIVING MEMBER	Shares Tending	Security	Price	Value	
<i>Burton & Burton</i>	<i>200</i>	<i>Am. Can</i>	<i>140</i>	<i>28</i>	<i>000 -</i>
On Stock Clearing Corporation Security Balance Order Delivered subject to the Rules of the Stock Clearing Corporation					
Total Delivery <i>200</i>					
Delivered <i>200</i>					
Bal. to Deliver <i>—</i>					
Charge to the Account of Receiving Member					
<i>LH</i>					

PLATE 29. THREE-WAY CENTRAL DELIVERY TICKET. PART 1.

All three parts, made out in carbon, attached to the actual stock certificate delivered to the Central Delivery Department. This first part is detached, when the receiving member calls for the stock certificates, and goes directly to the Stock Clearing Corporation cage of the receiving member where it immediately transfers the contingent debit to an actual debit.

separate missions with loss of time in receiving credit at the Clearing House, loss of effort, added danger of losing the securities, etc. Now, through the medium of the central delivery system, Leland & Company can send perhaps all 100 securities, addressed to all 100 firms, to the Clearing House by one messenger, and inside of perhaps as few as two or three minutes after the receiving teller has checked over the securities delivered, Leland & Company will stand credited with their total value of

perhaps \$10,000,000 or \$20,000,000 on the books of the Stock Clearing Corporation.

Perhaps the greatest advantage of the central delivery system is this added speed with which deliveries are made and credit received. Reduction of risk in transportation is also a valuable factor, however, and superintendents of some of the large office buildings in the Wall Street district have reported estimates that their elevator traffic has been reduced from five to as high as 20 per cent. since the new system has been in operation.

Future Potential Developments of the Clearing System

Despite the strides already made in speeding work of the Clearing Corporation, and the splendid records upheld during the hectic days of the Stock Market Panic of 1929, authorities of the Stock Clearing Corporation realize the necessity for constantly expanding physical facilities to care for even greater trading volume than has been seen in the past, trading at perhaps peak loads of 20,000,000 and 30,000,000 shares per day.

Automatic Accounting Machines

Experiments are constantly being made with the aim of replacing human by mechanical operation. Perhaps the most far-reaching change in basic method which is now in sight is in the probable replacement of clerk accounting by machine accounting in the Stock Clearing Corporation. Experiments have been under way with machines using the punch system of automatic counting and calculating, and an entire set of such machines is under experimental operation, the new method being tested under varying conditions and varying loads of stress.

Central Deposit Bureau for Securities

Another rather logical step in expansion of the central delivery system for the Day Branch is a central deposit bureau for stocks and bonds. Just as the present central delivery system has done

away with much of the old direct delivery in active security issues, so it would seem possible for such a future central deposit office to maintain constant possession of securities, within practical limits, of course, merely transferring their ownership

CHARGE TICKET				
Delivery Between Members, Through Central Delivery Department				
LELAND & CO. 000				
Name and Clearing Number of Delivering Member				
STOCK CLEARING CORPORATION				
(DAY BRANCH) New York <i>April 21, 1929</i>				
NAME OF RECEIVING MEMBER	Shares Ownder	Security	Price	Value
<i>Burton & Burton</i>	<i>200</i>	<i>Am. Can</i>	<i>140</i>	<i>28 000 -</i>
On Stock Clearing Corporation Security Balance Order Received subject to the Rules of the Stock Clearing Corporation				
Total Delivery	<i>200</i>			
Delivered	<i>200</i>			
Bal. to Deliver	<i>—</i>			
2	Received by the Undersigned <i>Burton & Burton</i> <i>per John Doe</i> Signature of Person Receiving Securities			

PLATE 30. THREE-WAY CENTRAL DELIVERY TICKET. PART 2.

This second copy is detached by the Central Delivery and retained as a receipt for the actual certificates delivered, signed by the receiving firm's messenger, John Doe.

title on the books of the Stock Clearing Corporation, instead of requiring actual physical exchange of such securities between brokers.

These are two great innovations which are yet to come, but it is only reasonable to expect such further radical changes in the future development of the Clearing House machinery.

We have seen how the regular securities are delivered and credited, through the medium of the present central delivery department of the Stock Clearing Corporation. Let us see how they are delivered and their amounts charged, through the same medium. We have disposed of the collective delivery ticket which listed all the securities delivered by Leland & Company.

But each of those securities is now in the central delivery offices, each with its own individual delivery, or charge, ticket attached.

Stock Receipt from Clearing House

The delivery ticket has on its face the name of the firm to whom delivery is being made, and the individual securities are now sorted out by clerks and placed in their proper boxes to await

MEMORANDUM				
Delivery Between Members, Through Central Delivery Department				
LELAND & CO. 000				
Name and Clearing Number of Delivering Member				
STOCK CLEARING CORPORATION				
(DAY BRANCH)				
New York <i>April 21, 1929</i>				
NAME OF RECEIVING MEMBER	Shares Delivered	Security	Price	Value
<i>Burton & Burton</i>	<i>200</i>	<i>Am. Can</i>	<i>140</i>	<i>28 000 -</i>
Total Delivery <u><i>200</i></u> Delivered <u><i>200</i></u> Bal. to Deliver <u>—</u>				
3 <i>LLH</i>				
This Ticket to be retained by Receiving Member as their record.				

PLATE 31. THREE-WAY CENTRAL DELIVERY TICKET. PART 3.

This third copy is stamped by the Central Delivery and given to John Doe, along with the certificates for the receiving firm's record.

the messenger of the receiving firm who is constantly calling for the contents of his firm's box throughout the day. All messengers entering the precinct of the central delivery branch must present their identification cards before they are admitted. Special care, of course, is taken to identify the receiving messengers. Let us suppose, as previously noted, that Leland & Company have been directed by the Night Clearing Branch to deliver their balance of 200 shares of American Can common stock to Burton & Burton. The messenger for the latter firm calls at his proper

window in the central delivery branch. He presents his identification card to the teller, who thereupon presents the contents of Burton & Burton's box to the messenger, including the 200 shares of American Can from Leland & Company.

The American Can certificate still has attached to it the three-way delivery ticket made out by Leland & Company. The teller stamps all three copies. Copy number two is signed by the messenger for Burton & Burton as a receipt for the stock and this copy is retained for the records of the central delivery branch. Copy number three is given to the messenger of the receiving firm for its records of such receipt.

The first copy, in this case, is the most important of the three, for it goes directly to the cage of the receiving member, in our example Burton & Burton, and immediately becomes an order to charge the receiving firm with the amount of the securities delivered. Thus a few minutes after the messenger has signed the receipt for his 200 shares of American Can, received from Leland & Company, the account of Burton & Burton is charged with the cash extension of that stock.

Establishing Debit for Receipt of Stock

As such charge tickets are received by the clerk for the receiving member in the member's cage, they are checked off on the contingent debit list, furnished by the member at the beginning of the day's business, and the various items of contingent debit thus become actual debits on the books of the member in account with the Stock Clearing Corporation (See Plate 26). At the right-hand side of the contingent debit list is a detachable column in which are entered the stocks for which "Failed to Deliver" tickets have been received. Such items, of course, become failed to receive items for the receiving member and are therefore credits, or offsets, to the contingent debit list.

On the reverse side of the contingent debit list is a form which the making firm must sign, pledging any and all of the stocks listed for receipt during the day as collateral in favor of the Stock Clearing Corporation. This is merely to protect the Clearing

I (We) hereby pledge and assign to the Stock Clearing Corporation the securities mentioned in the list on the reverse side hereof, the numbers of which securities are entered on my (our) proper books of record, as and when received by me (us), to secure payment to the Stock Clearing Corporation of any and all amounts due or that may become due from me (us) to said Stock Clearing Corporation on this day's transactions by the Stock Clearing Corporation for my (our) account and I (we) do hereby agree that all of said securities so pledged shall be delivered to the Stock Clearing Corporation at 2:45 P. M. this day or on its previous demand unless my (our) debit balance with the Stock Clearing Corporation on the entire day's transactions has previously been settled or otherwise secured to the Stock Clearing Corporation's satisfaction, it being understood, however, that I (we) may substitute for said securities or any of them the proceeds thereof or other securities of equal value. I (We) agree in respect to all securities so pledged that the Stock Clearing Corporation shall have the right in the event of my (our) failure to pay any amount due by me (us) to said Stock Clearing Corporation upon the day's transactions as and when required by the rules of said Stock Clearing Corporation to sell the whole or any part thereof on the New York Stock Exchange or any other available market or at public auction or by private sale and without notice to me (us). If the sale is made on the New York Stock Exchange or the New York Curb Market Exchange or any other exchange or if the sale is at public auction, the Stock Clearing Corporation may purchase for its own account the securities sold. The proceeds of sale shall be applied by the Stock Clearing Corporation to my (our) debit balance and I (we) shall remain liable to the Stock Clearing Corporation for any deficiency.

Seland & Company
Firm Signature.

Witness:

John Roe

PLATE 32. CONTINGENT DEBIT LIST PLEDGE

Signed by the receiving member on the reverse side of the Contingent Debit List, pledging the certificates to be received, to the Stock Clearing Corporation while they are in the latter's possession,

House against any member overdrawing his account and the association can therefore withhold delivery of such securities until they are paid for or the proper credit is established on the member's books.

During the time between receipt of securities delivered and delivery of securities received, therefore, the securities are merely directed to their proper recipients, but in that interval they are potentially the property of the Stock Clearing Corporation. This is logical because the delivering firm is credited with the amount of the securities immediately upon their receipt into the central delivery branch, while the receiving firm is not charged with their amount until such later time, perhaps an hour or two distant, when the securities again leave the central delivery offices and actually pass into the possession of the receiving member.

Delivery of Ex-Clearing Stocks

We have now followed the forms of usual procedure in comparison, delivery and credit for transactions in regular securities,

C15-928-200M Clearing No. <u>000</u> (Delivering Member)		Blotter Line No. <u>2</u> (Receiving Member)	
Securities not entered on previous Night Clearing Sheet			
STOCK CLEARING CORPORATION (DAY BRANCH)			
New York, <u>January 22</u> 19 <u>30</u>			
Blotter Line No. Delivering Member	(Receiving Member)	Shares <i>100</i>	Security <i>U. S. Leather</i>
<u>3</u>	<i>Burton & Burton</i>		Price <i>10 1/4</i>
			Value <i>1 025</i>
the undersigned will deliver the above			
TO <u>BURTON & BURTON 000</u> (Name and Number Stamp of Receiving Member)			
for account of the undersigned			
Account of _____		<i>Seland & Company</i> (Name of Delivering Member)	

PLATE 33. THREE-WAY EXCHANGE TICKET FOR "EX" STOCKS. PART 1.

The ticket is made out in triplicate, by the seller of an ex-clearing stock. Part 1 shows the Deliver Ticket, one of each being retained by the buyer and the seller.

or those which are cleared by the Night Branch. Approximately the same procedure is followed in the case of ex-clearing securi-

ties, or those not cleared by the Night Branch, but varying forms are used in the ex-clearing issues. Up to the present time, the central delivery system is available only for those regular, or cleared, securities, so that delivery of the "ex"-issues must be carried out as before, through direct delivery between the houses involved.

We have previously seen that all full-lot transactions made on the New York Stock Exchange have their cash extensions normally "settled," or cleared, through the Day Branch of the Stock Clearing Corporation, whether the stocks are regular and go through the Night Branch clearing, or whether they are "ex" and thus are not cleared through the Night Branch.

Exchange Tickets for Ex-Stocks

In the case of ex-clearing stocks the regulations for comparison are in no wise set aside, but such comparison is made through the

Clearing No. <u>000</u> (Delivering Member)		Blotter Line No. <u>2</u> (Receiving Member)			
Securities not entered on previous Night Clearing Sheet					
STOCK CLEARING CORPORATION (DAY BRANCH)					
		New York, <u>January 22</u> , 19 <u>30</u>			
Blotter Line No. Delivering Member		Shares Bought	Security	Price	Value
<u>3</u>		<u>100</u>	<u>U.S. Leather</u>	<u>10 1/4</u>	<u>1 025 -</u>
the undersigned will receive the above					
From <u>LELAND & CO. 000</u> (Name and Number Stamp of Delivering Member)					
for account of the undersigned					
Account of _____				<u>Burton & Burton-000</u> (Name and Clearing Number of Receiving Member)	

PLATE 34. THREE-WAY EXCHANGE TICKET FOR "EX" STOCKS. PART 2.

Part 2 shows the Receive Ticket, signed by the receiving member and returned to the seller, or delivering member.

interchange of exchange tickets, somewhat more complex than the exchange tickets for regular issues. On completion of a transaction in an ex-issue, the selling firm makes out its exchange ticket. This is in triplicate, consisting of two deliver tickets and one receive ticket. For its comparison the selling firm addresses the complete three-way ticket to the buying or receiving firm,

and delivers it to that firm through the usual medium of the central distributing office of the Night Branch (See Plate 33).

The messenger of the receiving firm calls for such exchanges at various intervals through the day, just as in the case of exchange tickets for regular or cleared stocks. The receiving firm receives the three-way exchange ticket for the ex-transaction, detaches and retains one of the two deliver tickets, as its own record of the comparison, stamps and signs the remaining receive and deliver tickets, and returns them to the original selling or delivering firm, through the central distributing office.

Contingent Lists for Ex-Issues

From these exchange tickets, or comparisons, the two firms make up their contingent credit and contingent debit lists, which

Form 042-9-29 100M		Stocks not entered on previous Night Clearing Sheet				Stock Clearing Corporation			
No. <u>000</u> (Clearing Member)		STOCK CLEARING CORPORATION (DAY BRANCH)				DAY BRANCH			
exchange tickets dated <u>January 22, 1930</u>		Contingent Credit List for value of Stocks to Deliver as per				STOCKS			
No. of List... <u>1</u>		Stamp Name of Member <u>LELAND & CO.</u>				Failed to Deliver			
						Total value of which charge to our account			
Slatter Line No. Delivering Member	Deliver to	No. of Shares	Stocks	Price	Value Stocks	Failed Stocks	Value Failed Stocks		
1									
2									
3	<u>Burton & Burton</u>	<u>100</u>	<u>U. S. Leather</u>	<u>10 1/4</u>	<u>1 025</u>	<u>-</u>			
4									
5									
6									

PLATE 35. CONTINGENT CREDIT LIST FOR "EX" STOCKS

Sent to the Day Clearing Branch each morning to apprise it of intended deliveries for the day, in issues traded yesterday but not cleared through the Night Clearing Branch.

we have seen, even in ex-clearing securities, must be sent to the Day Branch at the beginning of each day's business.¹ These contingent lists, of course, cover the transactions of the day before, which are to be "settled" by afternoon of the day the lists are delivered for use by the Day Branch. The exchange tickets are sent to the Day Branch, also, along with the contingent credit

¹ See Page 117.

and debit lists. Thus, if we suppose that Leland & Company have sold a non-cleared stock, let us say 100 shares of United States Leather common, to Burton & Burton, and they both have interchanged exchange slips in comparison and confirmation of the trade, Leland & Company will enter the amount of this trade on their contingent credit list for that day, to be delivered to the Day Branch the next morning, and will attach the exchange slip. Burton & Burton, on the other hand, are to receive the stock and they will therefore include the proper cash extension on their contingent debit list, attaching their own exchange slip to that list.

Thus we see how the Day Branch, by 10:30 A.M. every day but Saturday, has a contingent debit and contingent credit list for

Form 068-9-22-1028		Stocks not entered on previous Night Clearing Sheet				Stock Clearing Corporation DAY BRANCH	
No. <u>000</u> (Clearing Member)		STOCK CLEARING CORPORATION (DAY BRANCH) Contingent Charge List for value of Stocks to Receive as per				STOCKS	
exchange tickets dated <u>January 22, 1930</u>		Stamp Name of Member <u>BURTON & BURTON</u>				Failed to Receive Total value of which credit to our account.	
No. of List... <u>2</u>							
Slip No. Receiving Member	Receive from	No. of Shares	Stocks	Price	Value Stocks	Failed Stocks	Value Failed Stocks
1							
2	<i>Leland & Co.</i>	100	<i>U. S. Leather</i>	<i>10 1/4</i>	<i>1 025</i>	—	
3							
4							
5							
6							
7							

PLATE 36. CONTINGENT DEBIT LIST FOR "EX" STOCKS

Sent to the Day Clearing Branch each morning to apprise it of intended receipts for the day, in issues traded yesterday but not cleared through the Night Clearing Branch.

each of its members in ex-securities. Those contingent figures will not become actual, however, until actual delivery has been made and evidence submitted to the Day Branch. The contingent lists for ex-stocks, similarly to the contingent debit lists for regular stocks, have detachable columns on the right-hand side for offsetting entries on "Failed to Deliver" items, to assist in checking and proving each account at the end of the day (See Plates 35 and 36).

Direct Delivery

It now remains for the parties to the ex-contract to exchange the physical securities directly. The delivering member, in our example Leland & Company, makes out its ex-delivery ticket which is in duplicate, one a credit and one a charge ticket, each having detachable stubs, the credit ticket carrying the revenue stamps affixed by the seller (See Plates 37 and 38). The delivering member then dispatches this duplicate ticket to the receiving member, in this case Burton & Burton, along with the physical stock certificate, in this case for 100 shares of United States Leather common stock.

Burton & Burton, as the receiving firm, make certain that the certificates are as represented on the tickets and constitute "good delivery," sign and stamp both tickets, retain the delivered stock certificates and return the credit and charge tickets to the messenger, who takes them directly to the delivering member's window at the Stock Clearing Corporation.

Here the stub of the credit ticket is detached and returned to the delivering member's messenger as receipt from the receiving member to show completion of the delivery and that the delivering firm has been credited with its cash extension value on the books of the Stock Clearing Corporation. The stub of the deliver charge ticket is also detached and placed in the box of the receiving member to show that he has received the stock. The receiving member already has the stock in his possession and rarely wishes the confirmation of his receipt, hence this procedure is chiefly one of form.

The main part of the credit and charge tickets are then compared and detached. The credit ticket is retained in the cage where the delivering member's account is kept, and from this memorandum the account of Leland & Company is immediately credited with the proper cash extension, both on their contingent credit lists with the Stock Clearing Corporation and on the control sheets and slates. The charge ticket is sent to the cage where the receiving member's account is kept, and from that

memorandum the account of Burton & Burton is likewise debited with the proper cash extension on their contingent debit list. Thus do the contingent credits and contingent debits on ex-

Oct. 7 '10 2010M LELAND & CO. 000 Securities not entered on previous Night Clearing Sheet. (Name and Clearing Number of Delivering Member)		CREDIT TICKET Blotter Line No. <u>2</u> (Receiving Member)		Clearing No. <u>000</u> (Delivery Member)	
STOCK CLEARING CORPORATION (DAY BRANCH)					
New York, <u>January 23</u> 19 <u>20</u>					
Blotter Line No. Delivering Member <u>3</u>	Delivered to <u>Burton & Burton</u>	Shares (Number) <u>100</u>	Security <u>U.S. Leather</u>	Price <u>10 1/4</u>	Value <u>1 025</u> --
Credit the value of the above Security to the account of <u>Seland & Company - 000</u>					
Received by the undersigned WITH APPROVAL of STOCK CLEARING CORPORATION, subject to its rules.					
Total Delivery <u>100</u>		Time Received (Time Stamp with Name and Clearing Number)		Time Rec. by S.C.C.	
Delivered <u>100</u>				Name of Delivering Member <u>Seland & Co.</u>	
Bal. to Debit.		<u>Burton & Burton - 000</u> (Signature of Receiving Member)		Do not use CARBON ON THIS FORM as name and number will transfer.	

PLATE 37. DELIVER CREDIT TICKET FOR "EX" STOCKS

The seller makes out this ticket (in duplicate), sends it, with the actual certificates, to the receiving member, who keeps the certificates, signs both tickets, and returns them to the messenger and the Clearing House, where the credit portion transfers the contingent to an actual credit.

stocks become actual debits and actual credits on the books of the Clearing House.

Non-Member Banks

Although only members of the New York Stock Exchange are eligible for membership in the Stock Clearing Corporation and banks are thus automatically excluded from such membership, it has been found a great and mutual advantage to give the large New York banks a direct place in the process of stock and money settlement. This has been accomplished by accepting from 15 to 20 of these banks in the category of non-member and non-clearing banks.

Though they cannot clear stocks they can use the Clearing House machinery for settling balances or clearing cash, for making and receiving deliveries and the like. Special forms

are used for these activities between the banks and the clearing association members, and the Day Branch maintains a special department, adjacent to the central delivery offices, for this specialized work.

Stock Transfer Department

The Day Branch of the Stock Clearing Corporation has also established a separate Stock Transfer Department through which it issues its assignable receipts for stocks presented to it for transfer. This service was inaugurated in 1923 and is another

LELAND & CO. 000 (Name and Clearing Number of Delivering Member)		Securities not entered on previous Night Clearing Sheet.		CHARGE TICKET		Blotter Line No. <u>2</u> (Receiving Member)	
STOCK CLEARING CORPORATION (DAY BRANCH)							
New York, <u>January 23</u> 19 <u>30</u>							
Blotter Line No. Delivering Member	Received by	Shares delivered	Security	Price	Value		
<u>3</u>	<u>Burton & Burton</u>	<u>100</u>	<u>U. S. Seathen</u>	<u>10 1/4</u>	<u>1,025 -</u>		
Charge the value of the above Security to the account of <u>Burton & Burton</u>							
Received by the undersigned WITH APPROVAL of STOCK CLEARING CORPORATION, subject to its rules.							
Total Delivery <u>100</u>				Time Received			
Delivered <u>100</u>				(Time Stamp with Name and Clearing Number)			
Bal. to Deliver <u>—</u>							
<u>Burton & Burton - 000</u> (Signature of Receiving Member)							
Stock Clearing Corporation (DAY BRANCH) RECEIVE TICKET Blotter Line No. <u>3</u> (Delivering Member) <u>Burton & Burton</u> (Name of Receiving Member) Time Rec. by S.C.C. _____							
Do not use CARBON on THIS STUB as name and number will conduct.							

PLATE 38. DELIVER CHARGE TICKET FOR "EX" STOCKS

This is the duplicate portion of Plate 37. When signed by the receiving member, delivered to the Stock Clearing Corporation and detached, it transfers the contingent to an actual debit.

of the very valuable contributions of this association to its members. Previously, when a stock had to be returned to the transfer agent of the issuing company for transfer from one name to another, the certificate and the stock were a total loss to the owner for the time during which the certificate was in transfer, a period which might sometimes extend over a week or two. During this period the owner could not borrow on the certificate, could do nothing with it, in fact, since he did not have it.

Although it began operations with only a limited number of stocks, this department now accepts nearly every stock listed on the New York Stock Exchange for transfer, the only exceptions being the few stocks which do not have transfer offices in the Wall Street district. Besides offering the aid of its experts in hastening such transfer, the receipts for such stock in transfer, issued by the Stock Transfer Department of the Stock Clearing Corporation, are now accepted equally with the certificates themselves by all of the important lending banks in New York City, thus making these transfer receipts good for collateral and saving all the credit which previously went to waste while stocks were in process of transfer.

Another more recent extension of the Day Branch service is in the settling of commissions between members. The payments are handled with the debit and credit system, similar to other money settlements of the Stock Clearing Corporation.

Clearance of Loans

One other important service of the Day Clearing Branch includes the clearance of money loans from brokerage house clearing member to member or, more usually, from some banker to a Clearing House member.¹ Loans contracted by brokerage houses are generally secured by collateral consisting of stock certificates for high grade issues listed on the New York Stock Exchange. The banker making the loan retains possession of such collateral until the borrowing broker pays off the loan when the collateral is returned to him.

Since such loans are usually either on "call," that is, renewable merely from one day to another, or are made for comparatively short terms, there is considerable shifting of such collateral loans from one bank to another. If a broker wishes to pay off one loan, however, he usually has to borrow the money to do so from another banker. But he cannot borrow the money from the second banker until he has put up his collateral for such loan. The broker will usually want to use the same collateral on the second

¹ See Chapter XI, p. 237.

loan as the first, merely shifting the loan from one banker to another.

Savings of Loan Clearance

But he cannot get his money from the second banker until he has deposited with him that collateral. And he cannot get his collateral from the first banker until he has paid off the first loan. And he cannot get the money to pay off the first loan until he has gotten the second loan. The old custom, therefore, was for the broker to avail himself of costly and inconvenient credit from a third banker who was very close to him and would allow him an unsecured loan for the short interval between the time he paid off his first loan, got his collateral and negotiated his second loan. The third banker, though closer and more friendly than the other two who actually gave the broker the longer-term collateral loan, usually insisted on the broker carrying a large deposit balance in his bank. Besides the difficulty in arranging the temporary unsecured credit there were the inconveniences of drawing checks, having them certified, etc. The old method, therefore, was crude, slow and costly.

Under the new method the Stock Clearing Corporation acts as an agent for the brokerage house clearing member in his dealings with the loaning banks. All of the large New York City banks which make a business of lending money to brokers have their own cages in the Day Clearing Branch offices so that such business is transacted quickly and compactly. If a clearing member wishes to transfer a loan from one bank to another he merely gives notice to the two banks and to the Clearing House, as his agent.

The Stock Clearing Corporation pays off the first loan with its own check, which does not need to be certified, so strong is the Corporation's credit at all times. It receives, thereupon, for the broker, the collateral attached to the first loan and turns it over to the second banker as the new collateral for the second loan. Thus the difficult step of check certification and arranging temporary unsecured credit from the third banker is unnecessary

during the period of switching the broker's loan from one bank to another, due to the broker's use of the Stock Clearing Corporation's reservoir of credit, which he, as a contributing member of the clearing fund, has helped to build up.

Withdrawal of Collateral

During the period between the transfer of such collateral loans from one bank to another the Corporation, as the broker's agent, takes full charge of the broker's collateral security, or loan envelope. During this period the broker may, under certain conditions, withdraw individual security certificates from this loan envelope, if the next loan does not need so large an amount of security. Or if it needs the same value of security he may, also under fixed conditions, substitute new certificates of equal value for those which he desires to withdraw from his loan envelope, or collateral security. In this respect, also, the Stock Clearing Corporation affords a true and useful service to its clearing members.¹

In concluding our study of the Stock Clearing Corporation we may well consider some definite statistics on the actual saving which the clearing system has brought about. Statistics of the Night Clearing Branch show that over 90 per cent. of the total transactions on the New York Stock Exchange are cleared and that by such clearance there is accomplished a saving of about 60 per cent. of their value in banking credit.

Savings by the Stock Clearing Corporation

The Day Clearing Branch, in turn, furnishes a saving of about 60 per cent. of the value of the cash balance extensions remaining from the work of the Night Clearing Branch. The combined saving of the Stock Clearing Corporation in bank credit, therefore, amounts to almost 80 per cent. of the accommodation which would otherwise be necessary, and the clearance of loans for members adds still further economy. The clearing system for

¹ See Chapter XI, p. 238.

the New York Stock Exchange alone obviates the actual handling of nearly \$100,000,000,000 of funds each year, nearly 4,000,000 checks, and is estimated to save its members well into millions of dollars in banking credit, to say nothing of the saving in time and energy and convenience.

With such definite testimonials to its importance, therefore, our lengthy and often involved study of the New York Stock Clearing Corporation, its aims and its methods has, it is hoped, been time well spent by the student of stock market operations.

CHAPTER VIII

STOCK EXCHANGE CREDIT AND MARGINAL TRADING

Use of Credit in Stock Market Operation

In the preceding chapter we made brief mention of the service which the Day Clearing Branch of the Stock Clearing Corporation renders in transference of a brokerage house's loan from one banker to another.¹ This brings us to a consideration of the use of credit in connection with security buying and selling. If every individual who purchased stock was able and willing to pay for it with ready cash there would be no need for such use of credit in stock transactions. Such is not the case, however, and credit is used in doing business on the stock exchanges of our country just as it is used in transacting a major portion of almost all other businesses of the nation.

By far the greater portion of the purchases and sales of stock, as registered each day on the New York Stock Exchange, are made through the instrument of credit. It is a somewhat common, but mistaken, practice of writers on the subject of stock market operation as well as other authorities, to connect trades in stocks through actual cash payment with investment, and, conversely, to associate the trading in stock through the medium of credit with speculation. Such false associations have probably developed from the fact that in actual practice the investor usually pays for his stock in cash while the speculator is more likely to use credit in his purchase.

Credit and Speculation

But this situation in practice is based largely upon the ends to be gained by the two types of trader.² The relationship is not

¹ See Page 139.

² See Chapter II, p. 16.

iron-clad and is therefore an unsafe rule to formulate. To say that all investors buy their stocks for cash is just as erroneous a statement as that all speculators use credit in their transactions.

In actual practice the speculator is more likely to use credit in his transactions, because he is more likely to buy for anticipated market profits, which he can raise by purchase of additional units of stock on credit, because he is by nature more willing to take risks and because he is more likely to hold his position in any given stock a comparatively short time.

In considering the purchase of securities on credit it will be advisable to refer once more to our old thesis, which has been left in the background in recent technical chapters, that a stock certificate is nothing more nor less than the emblem of part ownership of physical and productive property. We have seen that the development of modern trading in all forms of large business has been predicated upon the ready representation of such property ownership by records or documents which are more easily transferable than the property itself.

Credit and the Ownership Theory

Real estate trading would be impossible without the medium of deeds and official recording offices for such deeds. So the trading of equities in physical and productive properties of an industrial nature would be impossible without the medium of the stock certificate. And stock market trading is nothing more than the trading of such stock certificates, representing part ownership in certain properties.

There is no difference, except in degree, therefore, between the individual who buys a home or factory by borrowing part of the purchase price through creating a mortgage on such property, and the individual who buys a stock certificate by borrowing a portion of the purchase price with the stock certificate as security or a guarantee to the lender that he will repay the amount borrowed. The latter individual is merely mortgaging his part ownership of the assets of the company represented in his stock

certificate. And just as the deed to one man's house is retained by the lender for security, so the stock certificate, or deed to an equity, is retained by the lender for equal security on the loan granted.

In both cases the transactions are made possible through the utilization of credit — the promise to pay a certain amount of money (or goods) at some future date. In both cases the individuals must put up a certain, but minor, portion of the purchase price for their properties in cash. But through promising to pay a still greater amount of cash at some future date they are able to buy property whose present worth is much greater than the amount of cash which they pay at the time of purchase. In other words, through the use of credit they are able to buy now a value for themselves which is beyond the value they could actually buy for cash.

Property Mortgages and Marginal Trading

By promising or borrowing money which he feels he is certain to receive at a future date, one individual is able to buy a house and lot whose present value is much greater than he could actually pay for now with ready cash. And likewise, by promising or borrowing money which he feels he is certain to receive at a future date, the other individual is able to buy a part ownership in some great steel mill, or in an association of huge properties whose present value is much greater than he could actually pay for now with ready cash.

The first individual is said to have bought his house and lot on credit, or through the mortgage principle. The second individual is said to have purchased stock on balance or, more commonly, "on margin." For some reason or other, there is still a tendency for the person unversed in the basis of such margin trading, who is also one of the reliable borrowing citizens of the town, to raise his eyebrows when he hears the term "margin trading." With the tremendous advances in public understanding of the stock market and its fundamentals in recent years this tendency is happily abating.

As the true meaning of stock purchase gains clear understanding it is difficult to see why the buying of stocks on margin should be considered any more of a sin than the buying of a home on the credit or mortgage basis, or the acquisition of a radio on the installment plan. In all such cases the purchaser is acquiring physical property with a true value and is merely using credit to acquire a greater value in the present than he could otherwise afford.

Dangers of Marginal Trading

Such an understanding of similarity in these purchases, however, does not free margin trading in the stock market from danger or lack of wisdom, any more than understanding of the credit principle involved frees mortgaging one's home or buying a radio on the installment plan from inherent danger. Circumstances alter the cases in all such examples. If the radio is of dubious value and the ability to pay in the future is questionable, then the installment radio purchase is unwise.

If the credit supplied by mortgaging one's home leads to the purchase of a more expensive home than one can afford, if the home is of dubious value to the purchaser, and if the ability to pay in the future is questionable, then the mortgaging of the home becomes an insidious danger. Likewise, if the credit supplied by buying a stock on margin leads to the purchase of more stock than one can afford, if the stock is of dubious value or if the ability to pay in the future is questionable, then the purchase of such stock on margin is admittedly unwise and dangerous.

There are various abuses possible in all means of using credit but the use of such credit has its definite advantages in all such methods if fundamental conditions are favorable. And if such conditions are favorable the buying of securities on margin, or through the medium of credit, is no less advantageous than the purchase of any other properties through a similar utilization of credit.

Economic Justification of Marginal Trading

It may be argued that buying securities on margin is more dangerous and less useful in an economic sense because the individual who buys a security on credit may do so merely with the idea of making a profit and reselling such security in the near future, whereas the individual who buys a home or a radio on credit expects to retain it in his possession for a long time and does not usually buy with the idea of reselling at a near-term profit.

Obviously such an argument is based on assumptions that are by no means necessarily true. We have seen that the individual who buys a security on credit need not do so with the idea of realizing a quick profit. He may be a true investor with the idea of holding his security for safety of the principal which he has put into it and for the income derivable from it. Also, the individual who purchases a home, or even a radio, or certainly a carload of radios, may do so through the use of credit, but may also do so with the idea of reselling at an early date and at a quick profit. Even the speculator, therefore, who buys stock on margin with the idea of reselling at an early date and with an early profit is just as much a legitimate business man as the real estate dealer who buys a home on credit or the wholesaler who buys radios on credit, with the idea of reselling at an early date and with a quick profit.

In all purchases of property where the credit instrument is utilized the owner's title to such property is not "clear" until he has discharged the debt contracted for purchase of the property and as security for which debt the property is sometimes held by the lender. The purchaser of the radio on the installment plan does not own the instrument "clear" until he has finished his payments, but he may enjoy the psychic income of his radio none the less.

Marginal Trading Like Any Loan

The man who buys his house and lot does not own it "clear" so long as there is a mortgage held against it, and the loan re-

mains unpaid. And the lender will continue to demand guarantee of his part ownership of the property until the loan is entirely discharged. But despite these facts, the purchaser of the home is still entitled to collect the full income of his property, whether it be merely psychic or in the form of physical or monetary income.

So it is with margin purchases of stocks. The purchaser is not the outright owner of his securities so long as he is still in debt for a portion of their cost. He must pay interest on that borrowed portion, just as the home-owner on his mortgage, but the stock purchaser receives the full income from his stock none the less. Whether his stock is in possession of his broker or banker, as security for his loan, the purchaser must be credited with any and all dividends or income of whatever nature which accrue to that stock during the time he holds it. To all intents and purposes he is the lawful owner, even though his title is not clear until he has discharged the loan against his stock.

Broker's Services Important

The individual who buys a block of stock on credit through his own negotiation finds his labor rather arduous when compared with the simplicity of buying stock on credit through the medium of a broker or a commission house. It is a part of the modern and complete service of the brokerage house to negotiate its customers' loans on margin stock which they have purchased, and the service is no small one.

For a specific example, let us go back to our friend, Mr. Angell of Los Angeles, who has decided to buy his 100 shares of American Can. To simplify our calculations let us say that he will buy the stock at the round figure of 140, instead of his actual purchase price of $139\frac{3}{8}$. If Mr. Angell wished to be perfectly independent of his broker he might order the purchase of his 100 shares of American Can through his bank. The purchase price would be around \$14,000. If Mr. Angell had that sum on deposit with the bank, he might draw a check against it and thus pay for, or "take up," his stock. Then, if he wished to utilize

his credit on that stock, he might pledge it for a loan from the bank of perhaps 75 per cent. of its actual market value, or, say, \$10,000.

In a broad sense Mr. Angell would then have bought his stock "on margin," for he would own the stock but not outright. He would own it and receive dividends, etc., from it, but his banker would retain possession of the stock certificate as security for Mr. Angell's promise to pay up in the future that loan, or the balance of the purchase price of his stock.

Convenience of Marginal Trading

But suppose that Mr. Angell has only \$5,000 on deposit and cannot draw his check for the full amount of \$14,000 to pay for and take up his stock in the first place. He must borrow approximately the \$10,000 balance to pay for his stock. But generally his banker would refuse to loan him this balance until he has the actual stock as security for the loan. But Mr. Angell cannot get the stock to put it up for security on the loan until he gets the loan itself to get the stock. In most cases, if Mr. Angell were even only fairly well known his banker would arrange to grant him a temporary and short-term credit to allow him to take up the stock. Or the banker would probably buy the stock himself and receive it direct for Mr. Angell upon payment of the purchase price, thereby retaining the stock constantly in the banker's hands. But that process is slow, cumbersome and involves the personal efforts of the purchaser to have his bank take care of the receipt of the stock and payment for it.

Let us now consider the process of purchase when Mr. Angell has opened his brokerage account and negotiates his margin purchase through his broker. All of the cumbersome details are now taken care of through the service of the brokerage house and its channels of affiliation with the New York Stock Exchange. In previous chapters we have watched Mr. Angell open just such a margin account with the Los Angeles branch of Leland & Company. When he placed his order to "Buy 100 American Can at the market" we saw that before the order was

executed the clerk in the brokerage office looked up Mr. Angell's account to discover if he had a sufficient fund on deposit with the firm to protect the house against loss in case of a decline in the value of the stock.

Example of a Margin Account

Let us assume that Mr. Angell had opened his account with deposit of a check for \$4,000. This is sufficient margin of credit, the order is executed and within a few minutes we have seen that Mr. Angell has his report confirming purchase for his account of the 100 shares of American Can. This is a margin purchase, for Mr. Angell has only \$4,000 cash to put up and must borrow the remaining \$10,000 to pay for his stock, just as he might have done from his banker in the preceding illustration. But in this case Mr. Angell is freed from all the cumbersome details. His broker takes care of the purchase, negotiation of the loan, payment for the stock, putting the stock up as security for the loan and all of the other detailed arrangements necessary.

It is common knowledge that the individual who purchases his house and lot on credit cannot finance the entire purchase price by such credit. He must pay down a certain portion of the price in cash. His banker will not be willing to loan him the entire amount which he has paid for the property. The reason for this is clear. The actual value of such property depends upon the price it will bring.

The present price is fairly well established for the purchaser has just paid that price for it. The banker will scrutinize that price and probably will not make the loan unless he feels the price paid is about equal to, or not much more than, the true value of the property. But the banker cannot gauge the future price which that property may sell for at some future time before the loan he makes is paid off. The property may depreciate in price. The banker is merely loaning money on the property. He is not buying it. He does not want it. He gets no income direct from the property. The risk involved must be taken entirely by the purchaser, for he is the one who will be the gainer if the

value of his property advances in the future. He, and not the banker, must therefore be the loser if the property diminishes in value. The banker must be sure that the property will not diminish in value below the amount of money he has loaned on the property. For that reason he will not loan the entire price which the purchaser has paid for it.

The Broker Takes no Risk

The same reasoning applies to the amount of money a banker or broker will loan Mr. Angell on the purchase of his stock. The broker or banker is merely an agent. He has no personal interest in the profits or losses possible in this transaction due to the advance or decline in the future price and value of this stock. The purchaser is the one who actually owns the stock. It is he who must accept the risk of loss as well as the possibility of gain in its value.

For that reason the broker or banker will not loan Mr. Angell the full \$14,000 required to pay for his 100 shares of American Can common stock. The banker or broker must always be sure, for his own protection, that the value of the stock is greater than the amount which he has loaned upon it. The difference between this market value and the amount loaned on the stock is the broker's protection in case of decline. It is the amount of ready cash or its equivalent which Mr. Angell himself must supply. And technically it is called his "margin." It is truly his margin of equity in the property which he has purchased. It is the portion of the total value of his property which Mr. Angell owns "clear."

In this case Mr. Angell has bought property, 100 shares of Can at 140, at a total purchase price of \$14,000. He has actually paid on that purchase price his cash balance in his brokerage account which is \$4,000. His broker therefore loans him the remaining \$10,000 to complete the purchase price. Or rather, his broker sees to it that such a loan is made, though it is probably negotiated through a banker, probably thousands of miles away in New York instead of in Los Angeles.

How to Calculate Margin

If the value of the stock should react, instead of advancing, then Mr. Angell's equity, or margin, would be correspondingly reduced. For remember that the broker is taking none of the risk. His loan on the stock remains constant at \$10,000. Let us say that the stock declines to 120. Its total value is therefore reduced to only \$12,000 instead of the original \$14,000. The loan of \$10,000 still remains constant. Mr. Angell's equity is reduced from \$4,000 to only \$2,000. He started out with an equity of \$4,000 out of \$14,000, or a margin of about 30 per cent. His margin has now been reduced to only \$2,000 out of \$12,000, or a margin of only 16 per cent.

This is too low a margin to protect the broker. The stock would have to decline only 20 points further to result in loss to the broker himself. The broker (through his bank) has loaned \$10,000 on this stock. The stock is his sole security for that loan. If he "forecloses" on the loan he has only this stock to sell, and if he cannot get a price of 100 for it, or a total of \$10,000, there will not be enough money to cover or repay the loan and in that case the broker himself will have to take a loss.

Average Margins Demanded

But we have previously seen that the broker has not entered this transaction with the idea of taking either gain or loss. He is merely an agent and he certainly will not risk taking a loss on his \$10,000 loan. Without taking the risk of allowing the stock to drop further from its present price of 120, therefore, the broker must take immediate steps to protect himself. He will require that Mr. Angell supply more cash or security of some acceptable kind, to reduce his loan to such a figure as will once more leave a margin of at least 30 per cent. between the actual present price of 120, or \$12,000, the value for the stock, and the amount of Mr. Angell's loan.

Such a margin of around 30 per cent. may be considered a fair

minimum margin of equity required by high grade brokers, though it often runs higher than that percentage, all dependent upon many factors. During the inflation period early in 1929, most brokers demanded 50 per cent. or more margin on most stocks. The broker always fixes the amount of margin required, of course, and it is his duty to himself to fix it always sufficiently high that he does not run the risk of having to foreclose on his loan, and sell the stock securing the loan for an amount less than that credit advanced on it.

In this case, Leland & Company will write (or, in abnormal situations, will telegraph) to Mr. Angell, call his attention to the reduced margin or equity in his stock and politely request that he send them a check for perhaps \$2,000. Or the broker may simply call Mr. Angell on the 'phone if he is a well-known customer and if Leland & Company are quite sure that he will put up the additional margin. If he does so, he will reduce his loan to \$8,000 instead of \$10,000. With the value of the stock now at 120, or \$12,000, Mr. Angell's equity, or margin, will therefore be \$4,000 out of \$12,000, or a margin of about 33 per cent. which brings it back again into a healthy state of protection for the broker at around the original figure of 30 per cent.

If Mr. Angell should disregard the broker's call for more margin, it will be the broker's right to foreclose on the loan. He may do so by selling Mr. Angell's 100 shares of American Can at the market price of 120. The broker receives about \$12,000 for the stock, therefore. He takes \$10,000 of the proceeds to pay off the loan, deducts his commissions, interest, taxes, etc., and credits the remaining balance of a little less than \$2,000 to the credit of Mr. Angell's account.

"Selling Out" the Customer for Insufficient Margin

The broker is perfectly within his legal rights in foreclosing on Mr. Angell's loan and "selling him out," because when Mr. Angell opened his account with Leland & Company he signed an agreement covering just such a contingency, and giving his assent to such foreclosure in event that he failed to respond to

any call for more margin on his stocks, when made by Leland & Company to his address as given to the broker. Margin calls are generally sent out by mail after the close of the market in the evening. It is assumed that they will reach the customer the first thing next morning. If he has not responded to the call for more margin by as early as perhaps eleven o'clock of that same morning, the broker reserves the right to sell him out at such time.

The Stock Panic of 1929

During the Stock Market Panic of 1929, when the value of many popular stocks was cut practically in half during a single days' trading, margin calls by wire or telephone, for margin before the next opening, were the only type practicable. So swift was the decline that some brokers, with justification, sold out small accounts after only a single unsuccessful attempt to reach the client by telephone. The debacle of October and November, 1929 made it imperative for brokers to adopt such apparently summary methods to protect themselves in the swift decline, and, in fact, such declines were swift largely because after the recession got started it was constantly forced onward and downward by such "necessitous" or "forced" liquidation.

To protect their own rapidly dwindling equities, the brokers were forced to act quickly and numerous lawsuits were brought by customers who felt they should have been given more time to put up additional margin. On the other hand, some brokers who gave customers too much time found that when they finally sold out the account they were unable to realize even sufficient funds to pay off their loan, and there have also been various lawsuits by brokers seeking to recover from their clients this difference to repay the loans against their stock holdings.

To go back to our example, if Mr. Angell comes across with his increased margin all is well unless the stock continues to decline. Then he is visited with additional calls for margin since the broker will continue to demand that Mr. Angell's margin remain above 30 per cent., that is, that the difference between

Mr. Angell's loan and the value of the stock at any given time shall be at least 30 per cent. of that same value of the stock at that same time.

Theoretically, if the price of his American Can common stock continued to drop to a hypothetical receivership figure of 10 the value of his stock would be only \$1,000. By that time Mr. Angell, if he had responded to all his many margin calls, would have had to put up enough additional margin to reduce his loan to around \$700, so that the difference between the loan of \$700, and the value of the stock, at \$1,000, would be \$300, and thus still be 30 per cent. of the current value of the stock. By that time, of course, Mr. Angell would have paid in a total of \$13,300, out of the total original purchase price of \$14,000, and would therefore practically own the stock "outright."

Market Value Affecting Margin

We need follow such gloomy hypotheses no longer, however, for we have now seen what happens to a margin account when the value of the stock put up as security for a loan goes down instead of up. We may now take up the more cheerful picture in which Mr. Angell takes the hero's part in a rising market for American Can.

We begin again at the beginning of the transaction, when Mr. Angell bought his stock at 140. He put up \$4,000, and his broker borrowed the remaining \$10,000 for him to complete payment for the stock. So long as Mr. Angell owes any balance on this stock or on the loan, the broker, of course, will retain Mr. Angell's stock certificate "for his account" and as security for the repayment of the loan.

We may now suppose that American Can common stock advances in market value in trading on the New York Stock Exchange and that within a week or two it is selling at 160 instead of the purchase price of 140. This is "meat" for Mr. Angell. The value of his 100 shares of Can is now \$16,000, but the amount of his loan remains constant at the original \$10,000. *Voila!* Mr. Angell has an "equity" of \$6,000 in his stock in-

stead of \$4,000. Since the broker takes no chance of loss or gain in the transaction, all of the gain accrues to Mr. Angell who is the actual and legal owner of the stock.

As a result of the increased market value of the stock, therefore, Mr. Angell's margin has increased. The difference between the loan of \$10,000 and the value of the stock at \$16,000 is \$6,000, instead of \$4,000, as at first. And this difference of \$6,000 is Mr. Angell's equity, or margin, out of the market value of the stock which is now \$16,000. His margin, or equity, therefore, has advanced from his original 30 per cent. to $\frac{6}{16}$ or nearly 40 per cent.

Paper Profits Raise Margin

Mr. Angell's margin is therefore well over the minimum of 30 per cent. and he may, if he likes, draw out a sum of about \$1,000. At the original purchase for \$14,000, however, all of Angell's \$4,000 margin was used up in part payment for the stock. Therefore, if he withdraws \$1,000 now it must be because his broker is willing to loan him \$11,000 on his stock instead of the original \$10,000. When Angell withdraws his \$1,000 from his brokerage account, therefore, his loan on the stock is advanced to \$11,000.

The broker is willing to raise the amount of his loan by this \$1,000 because the value of the stock has advanced to \$16,000 and he therefore still has a good margin of value in the security he holds over the face value of his loan. Likewise, the difference between the amount of the loan, which is now \$11,000, and the value of the stock, which is now \$16,000, is \$5,000, and this difference is Mr. Angell's present equity or new margin. That margin is \$5,000 out of the present value of the stock at \$16,000, of $\frac{5}{16}$, amounting to a little better than 30 per cent. Even though Mr. Angell has withdrawn some of his margin and increased his loan or mortgage on the stock, his equity is still up to the acceptable figure of around 30 per cent., or approximately the same percentage of margin he started out with.

In like manner, if the price of American Can continues to

advance, and the value of his stock thus continues its increase, Mr. Angell may continue to withdraw cash from his account, thus increasing the amount of the loan on the stock, so long as his margin, or equity, remains at as much as 30 per cent. of the value of the stock, and therefore protects the broker in the growing amount of the loan.

Pyramiding on Margin

In practice, however, Mr. Angell would probably not choose to withdraw such funds from his account. His margin would constantly increase, therefore. What he might do is to purchase additional stock with the additional credit allowed him by the increasing value of the stock on which the original loan was based. This practice goes by the technical name of "pyramiding," and will be discussed more fully in a later chapter.¹

Let us suppose, however, that Mr. Angell neither draws out his capital nor buys more stock with his increased credit, but rather decides the market price of American Can has advanced as far as it logically should, or that for some other reasons, not necessary for our present knowledge, he decides to sell his stock and "take his profits," at the current price of 160.

If he were still dealing directly with his bank, as in our first instance, he would have to go to all the trouble of arranging for the credit to pay off his original loan at the bank before he could get his stock, held as security by the banker, to sell it. Through the kind and efficient services of Leland & Company, his broker, however, he merely telephones the order clerk at that office and says, "This is Mr. Angell speaking. Will you please sell 100 American Can common at the market." He may give such orders over the 'phone, of course, only after he has been doing business with this certain clerk long enough so that his voice is recognized. If this is not the case he may drop a note to Leland & Company saying, "Please sell 100 American Can common at the market," and sign his name. Or if, as we saw him when he bought the stock, he happens to be in the office of Leland & Com-

¹ See Chapter XX, p. 499.

pany, he need merely pick up one of the convenient "SELL" pads, write "100 Can at market," sign his name, and perhaps his account number, and slip it through the window of the order clerk.

His order is then handled just as was his original buying order, and also similarly to the selling order of Mr. Mills of Miami from whom he originally bought his stock. In any case, within a few minutes, if his order is executed, his stock is sold, and if he is still in his broker's office the clerk will present him with a notice or confirmation of sale.

Completing the Margin Transaction

To further simplify our example, let us say that Mr. Angell sells his 100 shares of American Can common stock at a price of 160, or a total value of \$16,000. He has now completed the two sides of his transaction in Can and his broker takes care of all the details, once more, in paying off his original loan of \$10,000. And after deducting the brokerage commission, interest on the loan, and taxes for sales stamps, the balance of nearly \$6,000 is credited to Mr. Angell's account. He now has a credit balance of \$6,000 instead of the original credit balance of only \$4,000, and compared with a "debit balance" of \$10,000 against him, on account of the loan, immediately after his purchase at 140. Mr. Angell has taken a profit of 20 points on 100 shares of stock, or a total profit of about \$2,000.

Interest on Debit Balances

The interest charges noted in the previous paragraphs are those payable on Mr. Angell's loan, mortgage, debit balance or whatever it may be called. The rate of interest depends largely upon the current price of credit, usually upon the price of credit in New York since the loan was most likely made at that center. Leland & Company will probably charge a slight fraction of a single per cent. more interest than they had to pay, as a small commission to compensate them for the service rendered in negotiating the loan.

They will also charge Mr. Angell a commission of around \$25 for buying and \$25 for selling his 100 shares of Can since the stock is comparatively high priced.¹ Interest at six per cent. for two weeks on his debit balance of \$10,000 will amount to around \$25. His sales stamp tax will cost him about \$4. His total expenses in buying, carrying and selling the 100 shares of Can have been around \$80. His net profit is therefore about \$1,920.

In concluding our study of buying stocks on credit, a few moments on the methods of Leland & Company in negotiating Mr. Angell's loan of \$10,000 will not be amiss.

During these two weeks Mr. Angell has never had his stock certificate in his own possession. He has never seen it. It has been constantly in the hands of the banker who loaned him the money to complete its purchase and has only been given up by such banker when Leland & Company repaid the loan. We shall study, in a later chapter, some of the methods which Leland & Company and their agents employed in negotiating this loan.² We may also pause a moment to consider the importance of selecting a perfectly safe and honest broker in margin trading, in view of the fact that the customer must leave all the assets involved in the care of such brokerage house and its agents.

Greater Profits Possible Through Margin Trading

Finally, we note that through the use of credit in buying his American Can on margin, Mr. Angell has realized a profit of nearly \$2,000 in two weeks. Mr. Angell will not always be so fortunate, but it does happen outside of story books. Let us see how much he would have made under exactly similar conditions but without the use of credit. If he had purchased his stock outright, for cash, instead of with credit on margin, Mr. Angell would have been able to buy only 28 shares of American Can common stock at his purchase price of 140. Selling out at his sale price of 160 he would have realized a gross profit of \$560. He would have had brokerage fees to pay of perhaps about \$20 instead of \$50 and tax of \$2 instead of \$4. He would have saved

¹ See Chapter XII, p. 284.

² See Chapter XI.

the margin interest charges of \$25, but his total net profit on his investment of \$4,000 for the two weeks would have been about \$540. In the same time and with the same amount of capital, through margin buying, or the use of credit, he actually cleared \$1,920, or nearly four times as much as if he had purchased outright.

We cite this final little object lesson by no means merely to show the advantages of margin trading under ideal conditions, and by no means as an argument that all persons should trade in the stock market on margin. The use of credit in stock trading merely allows of trading in greater blocks of stock. It therefore increases amount of profits if the market value for the stock advances, but it also increases the amount of losses if the value for the stock declines. Margin trading is merely a means of increasing the rate of profit or loss on a set amount of capital.

Margin Trading Increases the Risk

The rosy-hued object lesson above, as a matter of fact, might have as its corollary another one of more somber hue, if Mr. Angell's stock had declined to 120 and he had sold out there. With a "line" of 100 shares on margin he would have suffered a loss of \$2,000 plus about \$80 in commissions, interest and tax, bringing his total loss to about \$2,080. If, with all other circumstances similar, he had bought outright, he would have had a line of only 28 shares, and his resulting loss would have been only about \$580 or approximately one-quarter of his loss on the marginal transaction.

The reader should not assume, therefore, that this chapter is an argument in favor of habitual and general trading on margin in the stock market. Marginal trading has its decided advantages in many ways but such advantages are only for those investors or traders who are thoroughly familiar with market practice and have had considerable experience in market trading. Stock market operation on margin, or credit, is merely a means of increasing profit or loss, and therefore of increasing the risk as well as the possibility of profit.

The experienced trader uses credit to advantage in stock trading but the neophyte will find it best to go slowly in adopting this aid. When he does begin to use it he will find its chief danger lies in the temptation to over-trade and to take too great risks, and he should be constantly on his guard against these evils.

CHAPTER IX

THE SHORT SALE

“ A Trick of the Trade ”

In nearly every business there are at least one or two “ tricks of the trade ” which may be profitable ones, but which may also be a bit difficult to negotiate or understand and are therefore used by only a few of the more advanced members of the industry. Such methods may also be exceedingly simple, when once their technique is mastered and their true nature understood. But it takes a surprisingly long time, quite often, for such practices to filter through into the rank and file of the industry.

That is essentially the case with the “ mysterious short sale,” in reference to stock market trading. Actually, the short sale is perfectly simple when it is fully understood, but for those who have not tried to master its theory and essence it still remains “ mysterious ” and risky, perhaps often wicked — something to be frowned upon and talked about in whispers and not in mixed company.

Perhaps the simplest way to describe the short sale in stock market trading is to say that it is just the opposite of “ buying stock long,” or of buying stock first and selling at a later date, which method of trading we have just studied in the preceding chapter. In describing our original transactions, in earlier pages, we have usually considered a “ transaction ” complete when an order to buy or to sell a block of stock had been duly executed. In a broader and more technical, but none the less truthful, sense, a transaction is not entirely completed until both the buying and the selling orders have been duly completed.

Reversing the Order of Trades

The truth of this statement is most easily apparent in the case of a short-term speculative transaction. If a speculator buys a stock one day at a certain price with the idea of selling it again the following day at a higher price, then it is only a half-truth to say that this man's transaction is completed when his original buying order has been executed. For, after all, his entire transaction in this stock will not be fully completed until the following day, when the anticipated sale of that stock has also been duly completed. He has then both bought and sold the stock and has completed his transaction which was merely begun with the original purchase of his stock.

When Mr. Angell received his confirmation slip in the Los Angeles office of Leland & Company, reporting the purchase of 100 shares of American Can common, we previously intimated that this ended the transaction for him to all current intents and purposes.¹ That statement, however, was not absolutely true. Mr. Angell's transaction in American Can was not completed but merely begun when he purchased the stock. All the two weeks during which he had that stock in his possession — speaking figuratively, since his stock was actually put up with the banker as security for his loan — all those two weeks that Mr. Angell owned that stock, was watching its market action and figuring his paper profits, just so long was his transaction in American Can in progress.

The Two Parts of Every Transaction

The transaction was not wholly completed until the day when Mr. Angell relinquished his interest in it, by ordering its sale, and subsequently received his confirmation from Leland & Company that they had sold this 100 shares of American Can for his account at 160. Then, and then only, in the larger sense, was Mr. Angell's transaction in American Can actually completed.

¹ See Chapter IV, p. 66.

Likewise, in the case of Mr. Mills, of Miami, we originally assumed that to all personal intents and purposes, his transaction in American Can was complete in itself when the clerk in Miami Brothers handed him his confirmation slip stating that his broker had sold for his account his 100 shares of American Can at 139 $\frac{3}{8}$.¹ We have assumed that Mr. Mills already owned the 100 shares of American Can which he sold to Mr. Angell of Los Angeles. In a narrow sense his transaction consisted only of the process of selling his stock, but in a larger sense that was only half of Mr. Mills' transaction in American Can. The other, and first, half took place on that balmy morning a full year previous, when Mr. Mills stood in the same office of Miami Brothers, came to the conclusion that American Can stock was worth more than it was then selling for on the stock market and proceeded to purchase his 100 shares of American Can common stock at the price of only 94.

It is clear, therefore, that every purchase of stock which is entered into with the idea of resale at a future date, is not actually completed until such sale is accomplished.

Double Nature of the Long-Pull Purchase

In the case of the long-pull, or permanent, investor who buys his stock with the fixed idea of "never selling it," the double nature of the transaction is less definite, but it is present none the less, even if only in spirit. If the investor who bought a stock for permanent holding were finished with the transaction as soon as he had completed its purchase, he would no longer take any interest in its value, or in the price at which the sale of other people's stock in the same company was taking place.

As a matter of fact, this permanent investor is constantly watching such sales because upon such resales of the stock depends its value for the permanent holder. If he could not sell it if he chose, his stock would have no direct value. Even though he does not actually intend ever to sell the stock, therefore, he is none the less constantly thinking of it in terms of such sale, for

¹ See Chapter IV.

thereon depends its fundamental value for him. Every time he has occasion to figure the present value of his stock, or to compute his paper profits on it, every time one of his heirs does the same, he has already sold the stock "in his own heart." The current value of the stock cannot be imagined, much less computed, without reference to such a sale, or completion of the transaction, whether such sale actually takes place on the New York Stock Exchange or merely in the mind of the owner.

Thus we see that in a larger and truer sense of the word, every stock transaction has two parts. As Aristotle would compare it with the perfect drama, every stock transaction, like a play, has "a beginning, a middle and an end." Thus far in our study we have considered only the "long purchase" of stock — that is, the stock transaction in which the first part is the purchase of the stock and the second, or completing, part is the sale of the same stock at a later date. In such a transaction the profit arises from the fact the individual has purchased his stock at a low price and has later sold at a higher price.

Making Money in a Declining Market

Suppose, now, that the student of values in the stock market finds a stock which he thinks is going down instead of up. It would be quite ridiculous for him, with such ideas of its market prospects, to buy the stock at the present time with the idea of selling it later. For if his reasoning is correct, the stock will decline in value instead of advance, and his subsequent sale would have to be at less instead of more than his purchase figure, netting him a loss and not a profit.

But all that is necessary to achieve a profit in his transaction is that the selling price shall be higher than the buying price. Therefore, if he thought the stock was going up he would buy now at a low price, and sell later at a higher price. But since he thinks the price of this stock is going down, that it will be lower in the future than it is now, all he has to do to make a profit is to sell the stock now at a high price and buy it later at the lower price.

He will thus complete the two sides to our stock transaction. He will buy and he will sell. He will buy at a low price and sell at a higher price, just as did Messrs. Mills and Angell. The only difference will be that he has reversed the order of the two parts to his transaction. He has sold first and bought later.

Selling High and Buying Low

This is, in effect, the difference between "long buying" and "short selling." If the trader buys first, then during the life of his transaction, and until that transaction is completed by sale of the stock, he is said to be "long" of that stock, to the extent that the stock's value would appear on the asset side of his personal balance sheet. On the other hand, if the trader sells first, then during the life of his transaction, and until he completes the transaction by purchase of the stock, he is said to be "short" of that stock, to the degree that the stock's value would appear on the debit side of his personal balance sheet.

It should thus be clear how the short sale is used to make profits for the trader if he thinks the price of a stock is going down in the future instead of up. But that clears up part of the mystery only. It does not answer the usual question, "But how can a person sell something that he does not own?" Nor does it answer the moral question, "But is it right to sell something that you don't own?" The answer to such questions must be found in the fundamental economics of any type of business or trading, and in examples of short selling with which we are quite familiar and sympathetic in every day life, but which we do not consider in their rightful light of a short sale. And such questions as those quoted above would not be asked if the questioner were familiar with the fundamental nature of the economic principle involved in selling short.

Use of Credit in Short Selling

In the previous chapter we discussed the use of credit in reference to stock market trading,¹ but only with reference to the

¹ See Chapter VIII.

long purchase of stock, and not with regard to the short sale. Credit has just as important a place in selling stock short as in buying it long. More in fact, since credit need not be used in buying stock long, if the buyer chooses to pay for the entire purchase price of his stock and own it "outright." But credit must always be involved in the short sale because it involves borrowing something which one does not presently have. Otherwise it would not be a short sale. If a man sells a stock short he sells it first, without actually having the stock, and he must therefore borrow it from someone who has it and is willing to lend it to him.

This answers the question as to how a man can sell something he does not already have. He does it by promising to deliver the thing he has sold at some future date. And this promise is the factor involving the use of credit. Credit is merely the process of acquiring something now for which promise is given to pay in the future the other article involved in the transaction, and whose delivery, except for the use of credit, would be demanded by the seller at the time the transaction was made.

Use of Credit Always Necessary

The man who bought his house and lot on credit acquired his property by giving his promise to pay the other article involved in the transaction (money) at some later date. The man who bought his radio on the installment plan made a transaction by which he acquired one value in the transaction (the radio) by giving his promise to pay the other value involved in the transaction (money) at a later date. Mr. Angell of Los Angeles acquired his 100 shares of American Can, one value involved in the transaction, by giving his promise to pay (a portion of) the other value involved in the transaction, the \$16,000 cash, at some later date. But if Mr. Angell had decided to sell 100 shares of American Can short, or before he purchased that stock, he would have done nothing fundamentally different. He would simply have acquired one value in the transaction, the \$16,000 cash, by giving his promise to pay

the other value involved in the transaction, the 100 shares of American Can common stock, at some later date.

The chief fallacy involved in condemning the practice of selling stock short lies in the too common belief that a sale is a sale and not a mutual transaction, involving both a buyer and a seller, and, conversely, the fallacy that a purchase is only a purchase, and not a mutual transaction, involving both a seller and a buyer. Cash is just as much a value as is a radio, or a home. When our friend bought his house and lot, he was merely one party to the transaction in which two parties were involved. Furthermore, his house and lot were merely one side of the transaction in which two sides were involved. When he bought his house and lot he made a trade, not a purchase. He traded a certain amount of money for his house and lot. He traded one value for another.

“Cash as a Commodity” Theory

When he bought a radio to put in his home, he did not merely make a purchase. He made a transaction. He traded one value, his cash or credit, for another value, his radio. The man who sold him the radio did not merely make a sale. He made a trade of one value, the radio, for another value, the cash or credit of the buyer. When Mr. Angell bought his 100 shares of American Can, he made not merely a purchase. He made a transaction. He traded one value, his \$16,000, for another value, his shares of American Can.

So far as fundamentals of economic trading go, therefore, there is no difference between goods and cash except one of kind. Both are property. Both are values. Cash, or money, or credit, all are merely convenient representations of property. If in one case, therefore, Mr. Angell traded the promise to pay one value in the transaction, money, at a future date, for the other value in the transaction, 100 shares of American Can common stock to be delivered now, there is no economic reason why he cannot reverse that process and trade the promise to pay one value in the transaction, the 100 shares of American Can common stock, at

a future date, for the other value involved in the transaction, money, to be delivered now. In the first case he bought his American Can stock long, through the use of credit. In the second case he sold his American stock short, also through the use of credit.

In none of these transactions is the trade actually completed until delivery of the promised value has been made. The radio transaction is not finished until the radio is completely paid for. The purchase of the house and lot is not truly finished until the mortgage is entirely paid off and cancelled. The purchase of American Can "long" is not truly completed until the loan of cash is discharged and paid off through sale of the stock. The sale of American Can "short" is not truly completed until the loan of the stock is discharged and paid off through purchase of the stock.

Masked Short Selling in Other Fields

The answer to the "moral" question in short selling is dependent merely upon a true understanding of what the transaction consists of and how the use of credit enters into it. It is all a question of what one is short. The farmer who receives his cash now for the crop he expects to deliver at a later date is short his crops to be delivered. The newspaper which collects the price of its subscription in advance is short the copies of the paper which it promises to deliver at later dates throughout the year. The club which collects dues from its members in advance is short the comforts and convenience of the club which the organization promises to deliver at a future date. The landlord who collects his rent monthly in advance is short the use of his apartment which he promises to deliver during the following month.

In similar manner, Mr. Angell, if he sells 100 shares of American Can short, receives the purchase price for that stock by promising to deliver the stock at a later date. Even our staid and conservative and morally upright Government is short the transportation of a letter when it sells a two-cent stamp. And the

Treasury Department of the United States is selling short fundamentally, when it collects cash from its investors and delivers to them merely a piece of paper with the promise to pay at some future date the amount of money which it receives at the time of the sale of its bonds, or certificates of indebtedness.

Both from a moral and from an economic standpoint all such transactions involve the receipt of one value in the transaction now, through promise to make deferred delivery, at a later date, of the other value involved in the transaction. And in all these cases the transactions are negotiated through the use of credit, through the faith on the part of one party to the transaction, in the ability and willingness of the other party to make good his promise to deliver at a later date. And, from the standpoint of moral values in economic transactions, it is difficult to see how selling stock short on the New York Stock Exchange is any more dangerous or any more deserving of condemnation than any of the other common and approved transactions which we have cited above.

Dangers of Short Selling

Short selling of stocks has its dangers from a practical standpoint, due to the nature of the element traded in, and due also to the human element and the psychological factor, but not due to any intrinsic moral irregularity or to any lack of economic justification. And the arguments and examples adduced in the earlier sections of this chapter are not presented to urge that every market trader and every individual is justified in selling short. From a practical standpoint short selling in the stock market is justified only on special occasions and only for the operator who has had experience and long study in the market.

A Specific Example of the Short Sale

Having indulged in our lengthy consideration of the theories, mechanical and moral, involved in short selling, we are prepared to approach the more practical and technical side of the question

—practice. Once more we shall progress more rapidly in our understanding of how stock is sold short by consideration of a specific example. And once more, we may pay another visit to our old friend, Mr. Angell, as he sits in the Los Angeles office of Leland & Company, his broker.

In our previous considerations of Mr. Angell, we found him optimistic on the market price of American Can common stock. He thought the stock undervalued and that it would advance in price. In other words, he was a “bull” on American Can, or he was “bullish” on American Can.

Let us suppose now that Mr. Angell sees this stock selling at around 160, and thinks that price is too high to be maintained. The stock has advanced too rapidly, the vegetable and fruit crops in the California section are small and there promises to be no great balance of the crops available at low prices for the canners, who will therefore be liable to use less cans than they did last year. Business in general looks as though it would fall off instead of advancing. Such considerations lead Mr. Angell to become a “bear” or take a “bearish” attitude. He may “sell against the box,” as explained on page 706, but in any case he wants to sell rather than buy.

In our previous illustration, Mr. Angell bought American Can because he thought it would advance and he could sell it later at a higher price. Now he decides to sell at 160 because he thinks he will be able to buy it back later at a lower price. In the previous illustration, when Mr. Angell bought long, he purchased the stock first and sold later. Now he is selling short — selling first and buying later, to complete the transaction.

Selling First

With this idea in mind, Mr. Angell writes out his order: “Sell 100 Can at the market,” signs his name and passes the order slip through the window to the order clerk. In all details the order is executed just as was the order of Mr. Mills of Miami, when he sold his 100 shares of American Can to Mr. Angell, and also just as was the order of Mr. Angell when he sold the 100 shares

of American Can at 160 which he had bought at 140, in our previous examples.

In any case, within a very few minutes after he has entered his order, Mr. Angell gets his confirmation of sale, notifying him that Leland & Company have sold for his account and risk 100 shares of American Can common stock at 160. Upon receipt of this confirmation Mr. Angell is through with this transaction to just the extent that he was through with his previous "long" transaction, when he received his first confirmation that Leland & Company had purchased for him 100 shares of American Can at 140. In both cases only one part of the transaction had actually been completed. In the case of the original long purchase, Mr. Angell's chief interest lay in watching the price and value of his stock advance. In the instance of the short sale, his interest will center in watching the value of the 100 shares of American Can which he has sold go down, or at least hoping that it will, in order that he may buy back the stock at a lower price than he sold it.

Borrowing the Stock

Though Mr. Angell's part in the rest of the transaction is chiefly a passive one, the part of the broker is far from that. Mr. Angell has sold 100 shares of American Can on the New York Stock Exchange and the main office of Leland & Company in New York must make delivery of that 100 shares of Can before 2:15 P.M. the following day. But Mr. Angell has "sold something he does not own." He cannot deliver the 100 shares of Can to his broker so his broker must borrow the stock in order to make delivery.

We have studied the variations of this statement in our previous chapters on the workings of the Stock Clearing Corporation.¹ We know that Leland & Company may have bought 100 shares of American Can on that same day on credit for some other customer and that therefore they may not have any "Balance to Deliver" on American Can common at all. But that

¹ See Chapter VI, p. 109.

does not affect the bookkeeping accounts of Leland & Company or of those two customers. Theoretically Leland & Company, with regard to this particular sale by Mr. Angell, will be instructed by the Night Clearing Branch on the morning following the sale, to deliver 100 shares of American Can common stock to some broker, let us say, once more, to Aaron & Company, before 2:15 P.M., for which Aaron & Company will expect to pay Leland & Company the sum, let us say, of \$16,000.

Aaron & Company do not care where or how Leland & Company get this 100 shares of American Can. All they are interested in is receiving it as "Good Delivery," that is, endorsed in blank with such endorsement guaranteed, so that the certificate is negotiable, and paying the \$16,000 for the stock to Leland & Company. It may happen that Leland & Company have a certificate for 100 Can in their office or, more likely, in their loan envelope at the Clearing House. In that case, instead of borrowing the stock, Leland & Company will probably withdraw this particular certificate from their loan envelope, substitute other stock or stocks of equal value, and thus will be able to make delivery to Aaron & Company without actually borrowing the stock.

Such a process would, of course, not affect the bookkeeping of Mr. Angell's account or affect his position as "short 100 shares of Can." We have previously seen¹ how the Day Clearing Branch of the Stock Clearing Corporation simplifies this process of withdrawing certain stock certificates from a broker's loan envelope and substituting other certificates of an equal value.

It might also happen that Mr. Angell sold his American Can at 160 shortly after the opening of the market and that his judgment, or luck, was so good that the price of Can almost immediately started down and reached a price of 155 before the close of the market. In such case Mr. Angell might decide to take his profit on the short sale on the same day. He could purchase 100 shares of American Can common at 155, therefore, and have his five-point profit on 100 shares, or \$500, without his broker ever having actually to borrow the stock for delivery, because such delivery was not due until the following morning, and by that

¹ See Chapter VII, p. 141.

time the broker who sold the 100 shares of Can to Mr. Angell at 155, on his second, completing, or "covering" transaction, would also have to deliver that stock. Leland & Company could therefore take the stock so delivered and make delivery of it to Aaron & Company though actually the sale and purchase would simply cancel out in their Night Clearing Sheet for that day.

Shopping for Stock

It is hardly likely, however, that Mr. Angell's anticipated decline in the price of American Can will develop so conveniently. His broker must therefore go shopping about to find out where he can borrow a negotiable certificate for 100 shares of American Can with which to make delivery on the morrow to Aaron & Company. To facilitate such shopping it is only natural that some sort of "market" for the borrowing and loaning of stocks should have grown up. With a constant demand from brokers whose customers have sold stocks short to borrow such stocks, the demand has been met by other brokers who make a business of loaning, or are willing to loan, such stocks and the two groups get together on the floor of the New York Stock Exchange in what is commonly termed the "loan crowd."

The Loan Crowd

Here, gathered about one of the desks on the floor of the Exchange, brokers borrow and loan stock certificates intermittently from shortly before the market opens throughout the day, though this business is most active from the close to about 3:30 or 3:45 P.M. If a broker has not borrowed the stock he needs by that time he must shop around personally and directly, probably by telephone, until he finds a broker with 100 shares of Can who is willing to loan him that certificate.

Let us suppose that Leland & Company's Exchange member, or floor broker, finds in the loan crowd the representative of Burton & Burton, who has 100 shares of American Can common stock which he is willing to loan to Leland & Company. Memo-

randums are made by the two brokers and between their respective houses, and delivery of the certificate for 100 shares of American Can is carried out just as though Burton & Burton had actually sold the stock to Leland & Company.

The latter firm enters the loan on its daily clearing sheet on the side to "Receive from Burton & Burton 100 shares of American Can" at the day's delivery price which we may assume is 160. Likewise, Burton & Burton enter the transaction on their daily clearing sheet on the side to "Deliver to Leland & Company 100 American Can at 160." Thus Leland & Company have cancelled their "Deliver" entry on the clearing sheet by a contra "Receive" entry and need not make such delivery, that being taken care of through delivery by Burton & Burton. There is no difference, therefore, so far as Clearing House methods of delivery go, between transmission of borrowed stock and stock actually bought and sold, as we have previously had occasion to mention.¹

Security for Borrowed Stock

The only difference is in the bookkeeping involved. We have previously seen that credit is involved in every short sale. Here the credit lies in the promise of Leland & Company to return the 100 shares of Can to Burton & Burton at some later date. It is quite customary that Burton & Burton will demand security for such promise of repayment of the stock from Leland & Company. This security takes the form of a loan from Leland & Company to Burton & Burton, of an amount equal to the current value of the stock which Leland & Company have borrowed. With the delivery price fixed this day at 160 on American Can, it is probable, therefore, that Leland & Company will loan to Burton & Burton the sum of \$16,000, as security for their promise to return at a later date the 100 shares of American Can which they have borrowed and which has the current value of \$16,000. Furthermore, this security must naturally fluctuate with the value of the stock loaned. If the stock advances and the loan is not also advanced, then the security becomes too small to protect

¹ See Chapter VI, p. 108.

Burton & Burton against the possibility that Leland & Company may not fulfill their promise to return the stock. If American Can closes at 165 on the following day, therefore, it would cost Burton & Burton \$16,500 to repurchase the stock in the open market which they have loaned to Leland & Company, in case the latter failed to return it. Therefore, to maintain the security, Leland & Company will have to increase their loan to Burton & Burton from the original figure of \$16,000 to \$16,500.

On the other hand, if the price of American Can declines to 155, then it would cost Burton & Burton only \$15,500 to replace their stock loaned to Leland & Company if the latter failed to fulfill their promise to return the stock they borrowed. Consequently, the security may be reduced, and Burton & Burton will be expected to repay \$500 of the money loaned them by Leland & Company, reducing the loan to only \$15,500, instead of the original figure of \$16,000.

Dividends on Short Stocks

During the whole time, however, while Leland & Company are borrowing the 100 shares of American Can from Burton & Burton, the stock is technically owned by the latter and it is Burton & Burton who are entitled to receive the benefits of that ownership. Consequently any dividends which may be paid on the stock during the period of the loan will be claimed by Burton & Burton from Leland & Company. The same holds true of other benefits, such as stock dividends, rights, etc. It is the duty of the loaning broker to claim such dividends, not when the stock actually goes ex-dividend, but when payment is actually due, since it would be manifestly unfair to expect Leland & Company to give up the dividend on American Can to Burton & Burton before such dividend had actually been paid. If American Can common goes ex-dividend, however, while Mr. Angell is short of it, Leland & Company will have to honor the claim of Burton & Burton for the amount of that dividend, on the date when it is payable, and Leland & Company will charge the amount of such dividend against the account of Mr. Angell.

Such charge may even be made after Mr. Angell has "covered" or bought back the stock and completed his transaction, since he might have done so after the stock went ex-dividend, but before the dividend was payable. Mr. Angell should not lose anything by holding his short position when Can goes ex-dividend, because, even though he has to pay the amount of that dividend, the price of Can will theoretically drop in proportion to the amount of such dividend, allowing Mr. Angell to "cover" or buy back his stock at a lower price than otherwise. We shall have more to say about this matter of stock prices and ex-dividend dates in a later chapter.¹

Loans to Lenders of Stock

Since Burton & Burton will be entitled to the dividends, or interest, accruing to the 100 shares of American Can common stock which they have loaned to Leland & Company, however, it is hardly fair to expect the latter broker to loan Burton & Burton their \$16,000 of security for repayment of the stock without charge. If they did, then Burton & Burton would be earning interest on the \$16,000 value of American Can stock as well as on the \$16,000 value of the loan from Leland & Company.

It is usual, therefore, for Burton & Burton to pay Leland & Company the going rate of interest for this security loan. If the loan of such stock as American Can is difficult to get, however — if the stock is scarce — then Burton & Burton are doing Leland & Company a real favor in loaning the stock to them, and they may expect special compensation in return. Such compensation is effected by varying rates of interest on this security loan from Leland & Company to Burton & Burton.

Loaning Flat

If American Can stock grows scarce in the loan crowd, therefore, Burton & Burton may demand that their interest rate paid on the security loan from Leland & Company be reduced to, say,

¹ See Chapter XV, p. 350.

three per cent., instead of the average or going rate of six per cent. If the stock becomes still more scarce in the loan crowd, Burton & Burton may refuse to pay any interest at all on the loan. In such a case American Can common stock is said to be "loaning flat."

If the scarcity of loanable certificates for American Can common stock continues to grow, Burton & Burton may go so far as to demand that Leland & Company pay Burton & Burton a premium over and above free use of the loan by Burton & Burton. In such a case American Can common is said to be "loaning at a premium."

Such cases are fairly common in certain stocks and they constitute one of the chief dangers in "selling what you haven't got," since when loanable stock is scarce the "premium" expenses, and all others, are naturally passed along to the selling customer (Mr. Angell) by his broker, under the now familiar theory that the broker is merely the customer's agent and takes no risk of loss any more than he takes chance of profit on the customer's transaction.

Loaning at a Premium

Such "premiums" may run up to rather appalling figures, such as a premium of 100 per cent., which would mean that besides loaning the security of \$16,000 to Burton & Burton free, Leland & Company, and thus Mr. Angell, would have to pay Burton & Burton interest on the \$16,000 at the rate of 100 per cent. per annum.

In such a case, also, due to the scarcity of the stock, the price of American Can would probably have advanced rapidly to say 300, so that the loan also would have had to be raised to \$30,000, instead of the original \$16,000, and besides that Leland & Company would therefore have to be paying Burton & Burton their premium at the rate of 100 per cent. per annum on that \$30,000 instead of \$16,000. Such an extreme situation is rare and smacks of a "corner," which will be further discussed in a later chapter.¹

¹ See Chapter XX, p. 497.

Calling a Loan of Stock

It is within the right of either party to the loan of stock to give notice of termination of the loan at any time, to take effect on the following day, the stock and loan of cash being returned via the original Clearing House channels through which they were made. Burton & Burton may decide to call for the return of their 100 shares of Can on a day's notice and would of course return the security loan of \$16,000 to Leland & Company when the latter repaid the stock.

Likewise, Leland & Company might decide to repay the loan of stock on a day's notice and would expect Burton & Burton to repay the cash security loan to Leland & Company upon receipt by Burton & Burton of their 100 shares of borrowed American Can common stock.

Generally, of course, the loan is continued in force until Mr. Angell decides to buy back his stock, "cover" his short sale, and thus allow Leland & Company to repay the loan of stock to Burton & Burton. The security cash loan from Leland & Company to Burton & Burton also remains constantly in force, of course, until return of the stock from Leland & Company to Burton & Burton.

We have now left Mr. Angell for quite a while watching his stock move up or down in price, while we studied the methods of Mr. Angell's broker in borrowing the stock in New York to make delivery for Mr. Angell on his short sale. Let us now return to Leland & Company's office in Los Angeles and examine a little more closely the relation between Mr. Angell and his local broker, during the period while he is short of American Can.

Back to the Example

When Mr. Angell sold his 100 shares of American Can common at 160 he received payment for it of \$16,000 from whoever bought the stock from him. Leland & Company place this amount, less the selling commission of \$25 and sales stamps, as a

credit to Mr. Angell's account but he is also debited with the 100 shares of American Can common which he is short and which they are borrowing for him. At the start of the transaction, therefore, Mr. Angell is theoretically long of about \$16,000 in cash and short of 100 shares of American Can common stock whose value at that time is \$16,000. Thus far his account is in balance. Leland & Company are not satisfied with this situation, however. Remembering that they are merely the customer's agent and must take any risk of loss, they must be secured against an advance in the value of the 100 shares of Can which Mr. Angell is short.

If the price of Can should go up to 165, for instance, as it might conceivably do in a few hours of trading, and Mr. Angell refused to put up any more capital than the \$16,000 which he received as a credit from the original sale of the stock, then Leland & Company would have to go out into the open market and buy 100 shares of American Can common at the market price of 165 to repay the loan of that stock which they contracted from Burton & Burton. In buying the stock at 165, however, Leland & Company would have to pay \$16,500 for it, or \$500 more than Mr. Angell had on credit with them. Thus would Leland & Company be \$500 in the hole, when we know that Leland & Company are only Mr. Angell's agents, are supposed to take no risk in his transactions and suffer no possible loss as a result of them.

Margin Requirements on the Short Sale

The short sale is entirely the responsibility of their customer, Mr. Angell, and he must run the risk of such a loss rather than put the burden on his broker. Therefore, in order to protect their own interest, Leland & Company demand that Mr. Angell put up some cash, credit or "margin" of his own, to bolster the credit of \$16,000 which he has received from the original sale of his stock. This margin is to protect Mr. Angell's short position and to protect his broker against loss through advance of the stock in question, instead of to protect his long position which we examined in the previous chapter, and thus protect his broker

against possible loss through a decline in the value of the stock then in question.

It is likely, therefore, that Leland & Company will demand that Mr. Angell put up at least a 30 per cent. margin against his short sale, just as they previously demanded a margin against his long purchase. This means that Mr. Angell must deposit with his broker, or have on deposit, a credit of perhaps \$5,000, besides his credit of \$16,000 from sale of the stock.

If American Can should actually advance to 170, then the value of the stock which Mr. Angell is short would be \$17,000 and his credit of \$21,000 would no longer be sufficient. Mr. Angell's margin, in the short sale, is still the difference between his total credit on the brokerage books and the present value of the stock in question, over the present value of that stock.

At the beginning of his transaction, therefore, his margin was the difference between his total credit of \$21,000 and the value of the stock in question at that time, \$16,000, compared with the total value of the stock at that time, or \$16,000. His margin was originally, then, that difference of \$5,000 over \$16,000, or $\frac{5}{16}$, or a little better than 30 per cent., which is satisfactory to Leland & Company.

Calculating Margin on the Short Sale

Now, however, since the market price of American Can has advanced to 170, this margin percentage has changed. Mr. Angell's total credit remains the same, at \$21,000. But the present value of the stock has changed from \$16,000 to \$17,000. His present margin is therefore the difference between his credit of \$21,000 and the present value of the stock, which is \$17,000, or a difference of only \$4,000, over the present value of the stock, \$17,000, giving a margin of $\frac{4}{17}$, or only 23 per cent., which is not sufficient for the protection of his broker.

Leland & Company will therefore demand that Mr. Angell put up perhaps another \$1,000 of cash, credit, collateral, margin or what you will. In such case Mr. Angell's total credit has gone

up from \$21,000 to \$22,000. The difference between this credit and the present value of the stock, \$17,000, which difference is now \$5,000, over the present value of the stock, \$17,000, is now $\frac{5}{17}$, or nearly 30 per cent., which is Mr. Angell's margin after putting up \$1,000 additional margin. Mr. Angell has thus raised his margin once more to the 30 per cent. required for protection of his broker.

Buying In the Short Customer on Insufficient Margin

If his broker calls for more margin when Can advances to 170, and Mr. Angell refuses to put up such additional margin, then it is within the legal right of Leland & Company to close Mr. Angell's transaction by covering his short position, through purchase of 100 shares of American Can common stock in the open market at 170, and thus repaying the loan of that amount of Can from Burton & Burton. In such case, Leland & Company would charge Mr. Angell's account with the \$17,000 which they paid for the 100 shares of Can to cover his original short sale. They would also charge him their regular commission fees of \$25 for selling and \$25 for buying the stock, plus the tax stamps incurred in the original sale of the stock. The debit of perhaps around \$17,055 would be taken out of Mr. Angell's original credit of \$21,000, and he would be left the balance of a little less than \$4,000, showing the loss of over \$1,000 on his entire and completed transaction.

If his broker called for more margin, and Mr. Angell thought the rise in Can was merely temporary and would shortly give way to lower prices, he would certainly put up the additional margin if he were able. If Mr. Angell decided that his original "bearish" expectations that Can would go lower were not correct, and now decided it would probably continue to advance, then he would order his short commitment covered at once. In other words, he would order the purchase of 100 shares of American Can at the market.

The order would probably be executed at around 170 and he would take the loss noted above just as in the case where his

broker covered for him. Mr. Angell might, of course, just about as well ignore his broker's margin call and let himself be "closed out" of the deal as noted in the preceding paragraphs. This would be leaving a good deal to chance, however, since the broker might wait patiently a little longer to close him out, with the result that his final covering purchase might be made at 172 instead of at the previous level of 170, thus resulting in still greater loss for Mr. Angell. Generally, then, Mr. Angell would either put up more margin or would order the covering of his short position personally.

A Successful Short Campaign

But enough of such melancholy theorizing. Let us credit Mr. Angell with being a better judge of market values and market movements. Let us assume that soon after he sold 100 shares of American Can common stock short at 160, the market price of Can began to drop. The newspapers began to print actual reports of the short crops of vegetables and fruits in the Pacific Coast districts. The public began to read of a slim canning season, of a decline in advance orders for American Can Corporation, and the possibilities that the company's earnings would suffer in the coming months. The public began to sell American Can. There were more people who wished to sell than who wished to buy. The market value for Can common dropped slowly but steadily until today, barely a month after Mr. Angell's foresighted sale at 160, the quotation for Can is hovering around 140 once more.

Mr. Angell's total credit on the books of Leland & Company still stands at the original figure of \$21,000, but the value of the 100 shares of stock in question has dropped from \$16,000 to only \$14,000. Mr. Angell's margin has therefore increased. The difference between his credit of \$21,000 and the stock's value of \$14,000 is now \$7,000, which difference is $\frac{7}{14}$ of the present value of the stock at \$14,000, or a margin of 50 per cent., which is well over the minimum of 30 per cent. required by his broker. Thus Mr. Angell may draw out \$2,000 of his account, reducing his credit

to \$19,000, and giving a margin of \$5,000 out of \$14,000, or $\frac{5}{14}$, or 35 per cent., which is still satisfactory to Leland & Company. Just as he left his favorable margin undisturbed when he was long of Can and it went up, so Mr. Angell would more likely be content merely to let his margin mount in the case of his short sale when the stock's market value is declining.

Pyramiding on the Short Side

Or he might, of course, use his additional credit, or margin, to finance the short sale of some additional stock of American Can at the lower prices then prevailing. Just as in the case similarly cited when he was long of Can, this action would be called "pyramiding," and it will be discussed somewhat more fully in a later chapter.¹

Let us assume, however, that Mr. Angell decides the price of American Can has declined too rapidly, or to levels equal to, or below, its real value. He decides to "cover" his short sale and take his profits in the transaction. He now performs the second part of his entire transaction, thus completing it. He orders his broker to "Buy 100 shares of American Can at the market." This order is executed in exactly the same manner as was his original order which we studied in a previous chapter, when he gave his first order after opening an account with Leland & Company, buying 100 shares of Can at $139\frac{3}{8}$.²

The only difference is in the results. This purchase of Can closes Mr. Angell's entire transaction, whereas we have seen that the first purchase of 100 shares of Can long merely opened that transaction, which was not completed until Mr. Angell sold his 100 shares at 160. His latest purchase of Can at 140 closes this latest short sale because it enables his broker, Leland & Company, to repay the loan of the stock from Burton & Burton, which latter firm thereupon returns the \$14,000 which Leland & Company were loaning them as security for the repayment of the borrowed stock.

¹ See Chapter XX, p. 501.

² See Chapter IV.

Profits in a Bear Market

Within a few minutes after giving his order, Mr. Angell is presented with his confirmation slip, notifying him that Leland & Company have purchased for his account and risk 100 shares of American Can common stock at 140. Mr. Angell has thus paid only \$14,000 for an equal amount of the same stock for which someone paid him \$16,000 about a month ago. By selling first and buying later he has made a profit. Also, by selling at a higher figure than he bought he has made his profit. Also by utilizing his credit in promising to deliver a certain value at a later date, for which he received payment in advance, he has made his profit. He has made his profit by selling short in a declining market, just as he previously made a profit by buying long in an advancing market. In both cases he has made his profit by buying at a lower price than he sold at. He has simply reversed the order of the two parts of his completed transactions.

Leland & Company now add to the price of \$14,000 paid for the purchase of Mr. Angell's 100 shares of American Can their regular commission of \$25 for buying. This is Mr. Angell's closing debit. He had a credit of \$21,000 at the beginning of the transaction, less perhaps \$30 for original sale commission and stamps, which, minus the debit of \$14,025, leaves him a credit balance of \$6,945, compared with the \$5,000 of his own cash which he originally put up as margin for his short sale.¹ He has made a profit on his short sale of 20 points on 100 shares of stock, minus commissions and other charges, leaving him a net profit of nearly \$2,000.

Credit Charges

If Leland & Company had to take less than the going rate of perhaps six per cent. interest on the security loan which they made to Burton & Burton, they will pass that loss along to Mr. Angell's account as a moderate further debit. In this case, how-

¹ See Page 181.

ever, with the price of Can declining, it is not probable that Leland & Company found any difficulty in borrowing the stock. They probably got their full six per cent. interest on the loan to Burton & Burton, and since that is all they would have to pay to get such a loan themselves they have not lost anything and probably will not charge Mr. Angell any interest at all on his short sale.

There was, of course, the contra debit on Mr. Angell's account of being short or owing 100 shares of American Can common stock, which debit was wiped out, of course, when he covered his short sale. The only interest chargeable on that debit of common stock, however, would be the dividends paid on the stock during the period he was short of it. And if the stock did go ex-dividend during that period we have seen that his account would be charged with the amount of that dividend. Therefore, since the short sale results in a cash credit balance on the customer's books, he need generally pay no interest on borrowed money. The interest a customer must pay in case of a long purchase arises from the fact that such a purchase results in the paying out of cash instead of its receipt, and therefore raises a debit balance on the customer's books.

It Happens in Story Books

Our friend, Mr. Angell, has been farsighted, has taken correct positions in the market and has reaped attractive profits from the transactions which we have watched him make. Let us not deduce, therefore, that he will always be so fortunate, or that because we have followed his actions carefully we must meet with just as generous a measure of success. Let us remember that Mr. Angell is only the character in a book, and that long transactions and short sales do not always work out so successfully as his have done. We are still studying merely the mechanical side of the stock market. In later chapters we shall try to discover some of the principles of trading which may help us to emulate Mr. Angell's shining example.

CHAPTER X

ODD-LOT DEALING

The Usual Unit of Trading

Thus far in our studies we have considered the buying and selling of stocks in units of 100 shares or more, only. We have done so not merely because such unit treatment lends itself better to calculation of total moneys involved, but also because 100 shares is the customary unit of trading and is the lowest stock trading unit recognized in most of the issues listed on the New York Stock Exchange.

The small investor or the limited trader may have felt somewhat discouraged at the large money totals which our previous examples have presented, feeling that such operations, running into the tens and twenties of thousands of dollars, were too far above his purse to bother with. It may be stated again, therefore, that such units have been used merely as more convenient mediums of example, and that the smaller trading unit under 100 shares has been devised for the trader who cannot afford to deal in the usual 100-share lots.

From a fundamental and theoretical standpoint the single share of stock would probably be the ideal unit of stock market trading, because it is the simple and irreducible unit, just as one apple, or one acre of land, or one pound of steel. But in the case of all these commodities it is at once apparent that the progress of our civilization and the growth of trading volume has made the use of such basic units utterly impracticable.

An Arbitrary Figure

The volume of trading in apples has necessitated raising the unit to boxes, barrels or carloads. Modern volume trading in land has necessitated raising the unit to hundreds or thousands

of acres, and in steel from pounds to tons and thousands of tons. In exactly the same way modern volume trading in stocks has necessitated the use of a larger unit of trading in the stock market than the single share, and as volume of trading increases the adoption of larger trading units actually simplifies total trading instead of making it more complex. Adoption of the 100-share stock trading unit is therefore a mere by-product of our advancing civilization, increased resources and enlarged wealth and buying power. If such increases continue it is entirely within the bounds of reason to conceive the future day when the stock trading unit may be raised from 100-share lots to 1,000-share lots, though such a change is admittedly far in the distant future, since the 100-share unit of trading meets the present demands in satisfactory manner.

As early as the Civil War period, when the New York Stock Market had first adopted its modern principle of continuous trading, the 100-share unit of trading had also been adopted. However, in the early days, more than ever, there was of course an active demand for purchase and sale of stock in blocks of less than the 100-share units. This business was handled either by the individual stock broker himself, in direct dealings with other individual stock brokers, or was turned over to a type of trader who "specialized" in the buying and selling of certain stocks. This "specialist" was naturally the center of trading in his individual stock and he was therefore the meeting place for buying and selling not only of the 100-share units but of the lesser blocks as well.

Odd-Lot Dealer must be a Specialist

His position is readily apparent. Since the unit of New York Stock Exchange trading is 100 shares of stock, and nothing less, in the great majority of issues, it is necessary to "split up" these 100-share lots in order to satisfy individual orders for less than that unit number of shares. The individual brokers cannot hope to receive enough of such orders, both buying and selling, in lots of less than 100 shares, to make possible their fulfilling such orders by trading in 100-share lots on the Exchange. They would

almost always have an odd number of shares in a myriad array of different issues, left over at the end of the day.

But the specialist occupied a different and preferred position. He was the center of trading in his particular stock and he could bunch his orders. He received so many orders to buy and sell blocks in less than 100 shares that he could buy perhaps 500 shares of his stock and sell an equal amount, thus trading in 100-share lots, and break these 500-share totals up into the smaller units of 10 and 20 shares which his brokerage house customers demanded for their own customers. He charged, of course, his regular pro rata commission for executing this business and the commission houses were, and are, glad to pay such commissions to relieve them of the burden and risk in trying to balance their orders of less than 100 shares so that they can trade in the regular 100-share units.

The Specialist

Thus the specialist was formerly given most of the "odd-lot" orders, as these orders for blocks of stock in any number of shares under 100 are called. This odd-lot trading was only one of his services to other brokers from which he made his livelihood. His other services were, and still are, in large measure, the execution of all orders in his particular stock which cannot be executed directly at the then current market. For instance, if a customer instructs his broker to sell 100 shares of Steel at 180 and the actual market for Steel at that time is only 175, the broker may have to wait days or weeks or months before his customer's "limit" price of 180 is reached.

Instead of keeping track of the constantly changing price of Steel over that potentially long period, therefore, the broker will relieve his mind of the whole duty by turning this order over to the specialist in Steel, who has many other similar orders on his book, and makes a business of watching the market in Steel and executing all such orders when their proper limit price has been reached. The specialist also handles "stop orders" which will be discussed in a later chapter.¹

¹ See Chapter XX, p. 483.

In the earlier days these specialists were glad to get their odd-lot business from the other brokers for it filled in the gaps between their other duties and brought them an added income at a time when limited and stop orders were not much in vogue and when total trading was comparatively small. Meeker tells us that during the early Civil War days of trading one single dealer, named Munroe, was credited with handling all of the regular odd-lot business of his time. As such odd-lot business increased, however, and also as the duties of the specialist in handling limited and stop orders in 100-share lots developed, the specialist found he was no longer able to take care of the growing volume of both these types of specialized trading.

Growth of the Odd-Lot Business

Gradually, therefore, there developed, along in the 1880's, a group of commission houses who took over the specialist's work in odd-lot dealing and made their own business one of concentration in this retail dealing with the commission houses who wanted to be relieved of the responsibility of filling their own odd-lot orders. The odd-lot houses, as they are now called, came into being in just the same way, from a basic economic standpoint, as did the first stock exchanges, the first commission houses, the Clearing House machinery, the loan crowd and all of the various other machinery for facilitating stock trading which we have studied thus far. They came into being as the answer to a genuine economic demand for a specialized type of service which one agency as a specialist could handle more advantageously than individuals who had other things to do.

As a result of the increasing demand for odd-lot trading mediums, there are at present about a half dozen very large houses in the Wall Street district who serve as specialists not in odd lots for any one stock but in executing odd-lot orders for other brokers in any and all given stocks. These odd-lot houses stand ready to buy or sell at any time during the day's active Stock Exchange trading any amount of any listed stock from one to 99 shares. They do not deal directly with the public. They

stand merely as dealers, executing odd-lot orders for the regular commission houses as their customers. Generally each commission house has its own group of one or two odd-lot houses to whom it turns over all of its odd-lot orders, regardless of size or the individual stock traded in. The specialist on the floor of the New York Stock Exchange still stands ready to execute odd-lot orders in special and individual cases, but he has been almost entirely superseded in this service by the modern odd-lot houses.

Growth of Odd-Lot Houses

The odd-lot houses themselves have grown rapidly, with increasing participation of the public and the small stock trader in the business of buying and selling securities, and some of the individual odd-lot houses rank well up toward the top in the list of largest and strongest stock commission firms. The odd-lot houses are, of course, members of the New York Stock Exchange just as are the regular commission houses and are restrained and guided equally by the strict regulations of the Exchange.

So rapidly has the odd-lot business increased in recent years that the odd-lot dealers have been forced to increase not only their clerical staffs and their offices, but have also been forced to buy additional seats on the New York Stock Exchange and take on associated brokers to assist them. Each seat entitles the owner to have but one active trader on the floor of the Exchange, and the odd-lot dealers, trading constantly in 100-share lots on the floor of the Exchange, to make up and balance their odd-lot business, have found it necessary to increase the number of their own floor traders and associates. Some of the larger odd-lot houses have as many as 33 such traders, one or two at every active post on the floor of the New York Stock Exchange. Although their associates often own their own seats, the odd-lot houses must thus be the owners of many seats on the Exchange, which, at recent prices of \$500,000 per seat, runs into a rather high total investment for such trading facilities alone.

Economic Value of the Odd-Lot Dealer

We have previously touched upon the economic advantage of the specialist, in this case the odd-lot dealer, in the business of trading in odd lots. Every odd-lot order is naturally a portion of a full-lot order. If the commission house received an order to buy 25 shares of Steel it would have to go into the trading on the floor of the Exchange and buy a full lot, or 100 shares, of Steel, in order to execute the odd-lot order to buy 25 shares. Thus the commission house, if it did not receive orders to buy an additional total of just 75 shares of Steel the same day, would close that day with a balance of Steel shares on its hands. With a commission house receiving odd-lot orders in perhaps 200 different stocks each day, it is apparent what confusion, to say nothing of expense, would be involved in such operations.

The odd-lot dealer, being a specialist, receives odd-lot orders from perhaps 100 different commission houses each day, so that the chances of the odd-lot dealer getting orders for the balance of 75 shares of Steel in that one day are much better than those of the individual commission house. In fact, so large is the business of the odd-lot dealer that he is likely to receive orders for the purchase of a total of perhaps 25,000 shares of Steel in that one day, instead of only 25 shares. This total of 25,000 shares will, of course, be the result of a great number of individual orders, just like the one cited, in lots of 10, 15, 20, 25 and any other number of shares from one to 99. All the odd-lot dealer needs to do, therefore, is to buy about 25,000 shares of Steel that day in lots of 100 shares or more and split up the 100-share units to fulfill his many odd-lot orders for the day.

Odd-Lot Dealer's Market Position

If the odd-lot house receives odd-lot orders in Steel totalling 5,035 shares the house will either buy a total of 5,100 shares of Steel and have a balance of 65 shares on hand at the close of the

day, or will buy only 5,000 shares and borrow the other 35 shares needed. In other words, the house may go short of the remaining 35 shares needed for delivery over the full round lot of 5,000 shares. This is assuming that the odd-lot house had no balance of Steel stock on hand at the beginning of the day, and did not have any orders to sell odd lots of Steel during the day. If the house had a balance of 35 shares of Steel left over from the previous day's trading, it would obviously need to buy only 5,000 shares in the market to fulfill its total orders of 5,035 shares of Steel for that day.

It is quite certain, however, that the odd-lot house will have plenty of orders from its various commission house customers, received in turn from the public, to sell odd-lots of Steel on this same day. In fact, the total of odd-lot orders to sell may be as high as or higher than those to buy. Assuming that on this particular day the odd-lot dealer received orders to sell odd lots of Steel to the total of 4,890 shares, and orders to buy totalling 5,035, and assuming also that he had no balance of Steel at the beginning of the day, the odd-lot dealer would have actually to buy only 100 or 200 shares of Steel in the open market, on the floor of the Exchange. His total business in Steel for the day requires him to buy 145 shares more than he sells. He need actually, therefore, buy only 100 shares in the open market, in which case he will spend the night "short 45 shares of Steel," which will not worry him much since the morrow may bring him an opening order to sell 45 shares of Steel, which will balance his account.

If he buys 200 shares of Steel on the previous day in question, and needs only 145 shares to deliver on balance, it is just as apparent that he will close the day "long 55 shares of Steel," will have 55 shares more of Steel than his orders actually call for and will therefore spend the night "long 55 Steel." This will not worry him much either, since his first order next morning may be to buy 55 shares of Steel, in which case his balance of 55 shares will just cover this amount which he must deliver and his books will again be in exact balance.

Balancing the Position

It is apparent in the above description that the odd-lot house takes advantage of its opportunities to "balance" its purchases and sales, so that it need only buy or sell on balance, in a manner similar to that which we have seen the commission house use in making up its "Balance to Receive" or its "Balance to Deliver" in connection with Clearing House transactions. During the particular day in question our odd-lot house has executed orders to sell a total of 4,890 shares of Steel. It will therefore receive that amount of stock, even though it be in a great number of small lots, with most of them certificates for 10 and 25 shares apiece. But it is only logical that the firm use the total amount of stock thus received on the sales executed to deliver the stock necessary as a result of its total purchases executed that day. As a result of purchases the house needs a total of 5,035 shares of Steel to deliver. Also as a result of the day's sales side it will have a total of 4,890 shares of Steel to receive. It is thus readily apparent that stock needed to deliver is only 145 shares more than stock which will be received and it is only this "Balance to Deliver" which the firm must worry about buying in the open market.

The Price Factor

This accounts for only the physical exchange of Steel stock certificates. Just as in our Clearing House studies we found the price element as important as the physical clearing element, so in the odd-lot business the firm's bookkeeping and finances must depend upon the element of price. The prices at which all of the many individual odd-lot sales and purchases have been made throughout the day are therefore of prime importance, but they have no effect upon the actual physical balance of stock which the house must receive from its sellers or deliver to its purchasers.

Originally, when only a few specialists were handling the odd-lot dealings farmed out to them by other brokers, the broker had

to bargain with the odd-lot dealer or specialist as regards the price of the trade. The odd-lot dealer might quote a price very close to the actual market quotation for the stock in 100-share units, or he might quote a price far above, in buying, or far below, in selling. In those early days there was not so active and ready a market for individual stocks, even in the usual 100-share lots, so that the "current quotation" might be a bit difficult to determine. In any case, it was usually the odd-lot dealer who fixed the price at which he would buy or sell less than 100 shares of stock. The commission broker might "shop" with other odd-lot dealers to find if he could get better execution elsewhere, but generally it was either a "take it or leave it" proposition.

The situation was not exactly ideal, therefore. As a matter of fact, it is not now either, but it has been tremendously improved upon as regards price fixing for odd-lot dealings. The improvement has been chiefly along the lines of making such trading prices for odd lots more automatic and more closely dependent upon the going market for 100-share lots as reflected by quotations on the Stock Exchange. The degree to which such prices can be made automatic is dependent upon the activity of the individual stock. If there were a sale of each individual stock listed at intervals of, say, every minute or two throughout the trading day then prices for odd-lot trades in all such stocks could be made practically automatic, since the latter prices are based upon those for the trades of 100-share lots. To the degree, therefore, that trades in any individual stock become so frequent as to approach this steady ideal of a trade every minute or two in 100-share lots, the price at which odd lots are traded becomes automatic.

Automatic Fixing of Odd-Lot Prices

It is for this reason that the setting of odd-lot prices has become more satisfactory in recent years, as trading on the New York Stock Exchange has continued to grow more active. The regular formula for price fixing is that the odd-lot dealer will sell blocks of less than 100 shares for his commission house

clients at $\frac{1}{8}$ or $\frac{1}{4}$ of a point below the next price for the trade of a "full lot" of 100 shares or more which is recorded on the floor of the Exchange after receiving the order. He will likewise buy less than 100 shares of any stock for his client at $\frac{1}{8}$ or $\frac{1}{4}$ of a point above the next price recorded for a full-lot transaction in that issue, after the dealer receives the order. In this way the odd-lot trader makes his profits. Since a purchase for his commission house client means practically a sale to that client from the odd-lot dealer, the latter sells at a price slightly higher than the actual full-lot price of the specific stock. On the other hand, since when the odd-lot dealer executes a sale for his commission house customer he is actually buying that stock from the customer, the odd-lot dealer buys at a price slightly under the actual full-lot price.

Profits of the Odd-Lot Dealer

Theoretically, therefore, if the odd-lot dealer receives five simultaneous orders from five different commission houses, each an order to sell 20 shares of United States Leather common stock at the market, he may bunch those orders and enter the market to sell a full lot of 100 shares of Leather at the current price, let us say, of 30. But he executes the five odd-lot orders at a price $\frac{1}{8}$ "away" from the actual price of Leather in 100-share lots. He therefore reports to each of the five commission brokers that he has "bought 20 shares of United States Leather at $29\frac{7}{8}$." In effect these sales for his clients mean that the odd-lot dealer has bought such stock from his clients. He has therefore bought a total of 100 shares of Leather, in five odd lots of 20 shares each, at a price of $29\frac{7}{8}$. But he has also sold his full lot of 100 shares of Leather, made up of the five 20-share lots, at the actual market price for 100-share lots of 30. He has thus realized a profit of $\frac{1}{8}$ of a point on 100 shares, or \$12.50, which is his gross profit on the five transactions which he has executed for his five commission house clients.

If the five orders had been to buy 20 shares of Leather the odd-lot dealer would have executed them at $\frac{1}{8}$ above the market price,

or $30\frac{1}{8}$. He would then have sold to his clients a total of 100 shares of Leather at $30\frac{1}{8}$, even though he actually paid only 30 for the 100 shares or the full lot which he bought in the open market. Thus again would the odd-lot dealer make his profit of \$12.50 on the five transactions for his commission house customers.

This is, in effect, the way the odd-lot houses make their profits. They do not charge their commission house customers any commissions but depend for their profit upon executing all of their sales a little lower and all of their purchases a little higher than the actual market price. The example given above is largely theoretical, since we have seen that the odd-lot dealer may not need actually to enter the market and buy or sell all of his purchases or sale totals, since he can cancel purchases against sales and thus enter the market only to execute the trades necessary to "balance" his account.

Execution "Away from the Market"

The leeway which the odd-lot dealer has in entering the market to balance his trading for commission houses accounts for much of the risk involved in the odd-lot business. We have shown that in theory our odd-lot dealer, whom we may call Mr. Ottman, would immediately buy his 100 shares of Leather at 30, to cover his sale of the five 20-share lots to his clients at the price of $30\frac{1}{8}$. In practice, it is largely up to Mr. Ottman's judgment as to whether he will actually do so, within certain limits set on his position by his odd-lot house. If he thinks the market for United States Leather common is going down he will almost certainly refrain from purchasing that 100 shares at the current market of 30, but will simply stay short 100 shares until the price declines or until he decides to cover.

The price of 30, which fixes the price of $30\frac{1}{8}$ at which he executed his clients' odd-lot orders, is merely the next price at which a full-lot transaction in Leather is recorded on the floor of the Exchange following receipt of his clients' five orders to buy their 200 shares each at the market. The sale of a full lot which fixes Mr. Ottman's price to his five clients, therefore, is the price

of his own purchase only in theory. In practice, it may or may not be the price of his own purchase, but more often it is not, since we have seen that he generally does not have to enter the open market to buy or sell as a result of each odd-lot trade he makes but merely to balance his accounts of purchases and sales.

An Odd-Lot Example

Let us take a more specific example to show just how such odd-lot trades are executed. Let us say that Mr. Angell of Los Angeles enters his order with Leland & Company, to buy 25 shares of United States Leather common at the market. Leland & Company wire the order to their New York office. The order is 'phoned to the firm's clerk on the floor of the New York Stock Exchange, just as was Mr. Angell's order for the full lot of 100 shares of American Can several chapters previous. Now Leland & Company can trade profitably and conveniently in lots of 100 shares of Leather on the New York Stock Exchange, but if they filled Mr. Angell's order for only 25 shares of Leather through their own floor broker he would be forced to buy a full lot of 100 shares, since that is the smallest unit of trading allowed in this stock on the Exchange. Rather than run the risk of having the remaining 75 shares of Leather left on their hands, therefore, it is the established policy of Leland & Company to turn their odd-lot orders over to Mr. Ottman of Ottman & Company for execution.

It is not necessary, therefore, for Leland & Company's 'phone clerk to call Mr. Leland and give him Mr. Angell's order for 25 shares of Leather. He already has his orders to give such odd-lot orders to Mr. Ottman. Mr. Ottman is regularly standing at the Leather post on the floor of the Exchange. Leland & Company's 'phone clerk therefore jots down the order as he receives it from his office, folds it up and places it in the pneumatic tube near his 'phone. Almost instantaneously it emerges at the Leather post addressed to Mr. Ottman. We have previously seen that each of the posts on the floor of the Exchange is thus connected



General N.Y.S.E.

PLATE 39. NEW-STYLE, OR U-SHAPED, TRADING POST. REAR VIEW

showing the pneumatic tube terminals connecting specialists with brokers' phone clerks and with other parts of the floor.

with the 'phone booths by these pneumatic tubes for just such messages and orders.¹

A Growing Position

The attendant, who stands always waiting for such messages at the Leather post, gives Leland & Company's order to Mr. Ottman — "Buy 25 shares Leather at market." Mr. Ottman

BUY 25 U X @ market Cancel to Buy 25 @ 24 1/4 JTC. LELAND & COMPANY X-000		
---	--	--

PLATE 40. FLOOR BUY SLIP

SELL 75 U X @ market Cancel @ MIAMI BROTHERS Z-000		
--	--	--

PLATE 41. FLOOR SALES SLIP

Both these forms are for odd-lot orders only. They are distinctively colored according to the particular odd-lot firm to which they go and have that firm's name printed on the reverse side. The ordering firm's 'phone booth number appears at the bottom of the forms, as well as a space for cancellation of a previous similar order.

first consults his record on Leather common stock to see how his inventory or balance stands. If he is then long more than 25 shares he can easily make this trade without any offsetting trade on his part. If he is already short quite a bit of Leather he may decide to buy 100 shares to bring his account in closer balance. If he thinks the price of Leather in full lots is going to decline, however, he will probably wait still longer before he covers his growing short position.

¹ See Chapter II, p. 28.

But he is forced by his agreement with the broker and the rules of the Exchange to execute the order of Leland & Company as soon as the next full-lot transaction in Leather takes place. Since Mr. Ottman is at the Leather post he watches the market and sees the next transaction which takes place perhaps a minute after he has received the order to buy 25 Leather from Leland & Company's 'phone clerk. We are not interested in the two parties to this transaction in 100 shares of Leather common, and neither is Mr. Ottman. All that they represent is a fair, free and open market for trading in that stock which guarantees that the price of their transaction is the going value of Leather at that moment.

Let us assume that this transaction was the sale of 100 shares of United States Leather common at the price of $28\frac{3}{4}$. Mr. Ottman accordingly makes his own entry in his record book for Leather common and then writes out his confirmation for Leland & Company, stating that Ottman & Company have sold to them 25 shares UX (U. S. Leather common) at $28\frac{7}{8}$. (See Plate 42.) Mr. Ottman then gives this confirmation to the attendant at his post who slips it into the pneumatic tube addressed to Leland & Company. The latter's 'phone clerk receives it an instant later, telephones the confirmation to his office, and in a few minutes Mr. Angell gets his own report in the Los Angeles office of Leland & Company saying that they have bought for his account 25 shares of United States Leather common stock at a price of $28\frac{7}{8}$.

Offsetting Orders

We may now return to Mr. Ottman. He has just sold another 25 shares of Leather which adds to his short position on the day's trading. But here is an order from Miami Brothers to sell 75 shares of United States Leather at the market. That is pleasant news for Mr. Ottman. The next 100-share sale of Leather at this post on the floor of the Exchange is down still lower, at $28\frac{1}{2}$. The report immediately goes back to Miami Brothers that Mr. Ottman has bought from them 75 shares of

Leather at $28\frac{3}{8}$, the usual fraction below the next full-lot price recorded after the order is received. (See Plate 43.)

Mr. Ottman is quite happy to buy this 75 shares of Leather from Miami Brothers at $28\frac{3}{8}$ for it will help him to deliver just that many shares of Leather common which he has sold to other

S old to <u>Leland & Co.</u>	
G. M.	
ANAC.	
So. Pac.	
B. P.	
P. U. B.	
C. I.	
PIPE	
J. O.	
25 U. X. @ $28\frac{3}{8}$	
Att.	
SOLD to <u>Leland & Co.</u>	
No.	153
OTTMAN & CO.	
G. M.	
ANAC.	
So. Pac.	
B. P.	
P. U. B.	
C. I.	
PIPE	
J. O.	
S. O. FLAT.	25 U. X. @ $28\frac{3}{8}$
Att.	

PLATE 42. FLOOR PURCHASE REPORT
SLIP

B ought of <u>Miami Bros.</u>	
G. M.	
ANAC.	
So. Pac.	
P. U. B.	
C. I.	
PIPE	
J. O.	
H. H. N.	
75 U. X. @ $28\frac{3}{8}$	
Att.	
BOT. of <u>Miami Bros.</u>	
No.	76
OTTMAN & CO.	
G. M.	
ANAC.	
So. Pac.	
P. U. B.	
C. I.	
PIPE	
J. O.	
H. H. N.	
75 U. X. @ $28\frac{3}{8}$	
Att.	

PLATE 43. FLOOR SALES REPORT SLIP

Both these forms are for odd-lot reports only, and are in two detachable sections, the lower one going to the broker as confirmation, the upper one retained for records of the specialist, or odd-lot firm. Plate 42 records a sale to Leland & Company, and is therefore their purchase. Plate 43 records a purchase from Miami Brothers, and is therefore their sale. The confirmation is numbered according to the original order.

commission houses, perhaps at considerably higher prices during the day. By purchasing this 75 shares from Miami Brothers Mr. Ottman is really doing nothing more than covering at lower

prices his previous short sales at higher prices and is thus making a profit over and above his usual $\frac{1}{8}$ of a point either way. Likewise, he is happy because through this balancing of purchases against sales he will not have to enter the market and actually buy full lots of Leather common.

Throughout the day's trading, therefore, Mr. Ottman stands ready either to buy or sell odd lots of any stock, including our example of United States Leather. His ideal and safest day is one on which odd-lot sales come close to being in perfect balance with his odd-lot purchases since he can thus hardly help realizing a satisfactory profit.

Risks of the Odd-Lot Dealer

As we have previously noted, however, the chief risks of his business come when either buying or selling run too far ahead of the other side of the market and he is faced with the problem of either entering the market for full-lot trading to even up his position, or taking a chance on letting his position grow. The odd-lot dealer must therefore be a keen judge of the market. He must know when to refrain from balancing and when to balance his position to protect his deals with customer brokerage houses.

In point of practice, however, only a comparatively small measure of leeway devolves upon the odd-lot floor man, since his firm has limited the extent of his long or short position by very strict rule. His house may have ordered that he shall not remain long of more than 300 shares of Leather or short of more than 250 shares. Within those limits his judgment is important, but in no case may he transgress the limits of his house. Such limits are, of course, varied for various individual stocks and are often changed from day to day. But despite such limits there are still plenty of chances within them for large gain or loss and that latitude, with the limits set by the firm itself, accounts for the chief risk in the odd-lot business.

If Mr. Ottman sold five blocks of 20 shares each of United States Leather to five commission house clients at a price of

30 $\frac{1}{8}$, due to sale of a full lot at 30, he might decide that he had better cover his five transactions by entering the market and buying 100 shares for himself on the next sale. If on this next transaction Mr. Ottman found that the market was so thin, or inactive, that he had to pay 31 for his 100 shares of stock, he would lose $\frac{7}{8}$ of a point, or \$87.50, on this transaction, since he sold the 100 shares in odd lots at a price of 30 $\frac{1}{8}$. Such wide fluctuations, of course, are more likely to occur in issues of small outstanding stock, or of limited activity, in which there is no great volume of bid and offered stock around the market price at any given moment. Wide fluctuations are also more apt to occur in high priced stocks, partly because their high price limits activity and also because their high price suggests comparatively wider price fluctuations than in low priced stocks.

Quarter Stocks

To protect the odd-lot house against such wide changes in inactive or high priced stocks, they are allowed to make their odd-lot executions at $\frac{1}{4}$ of a point away from the market, instead of only $\frac{1}{8}$ away as we have previously seen is the general rule in active issues. In other words, the odd-lot dealer will buy such stocks at $\frac{1}{4}$ of a point under the next price of a full-lot transaction and will sell the stock at $\frac{1}{4}$ above the next full-lot price. Or in still other words, the commission house customer receives $\frac{1}{4}$ of a point less than the full-lot price when selling and pays $\frac{1}{4}$ of a point more than the full-lot price when buying such stocks. These stocks on which the odd-lot dealer executes trades at $\frac{1}{4}$ point, instead of only $\frac{1}{8}$ point, away from the actual market, are called "quarter stocks." The list of such "quarter stocks" is arbitrary and subject to periodic revision by the odd-lot houses. At present all stocks selling at 100 or over in full-lots are considered quarter stocks while under 100 they are eighth stocks.

At the beginning of this chapter we saw that the more active any individual stock is the more likely is its odd-lot price to be fixed automatically. Conversely, the less active any indi-

vidual stock is the more difficult it is to determine a fair odd-lot price and the more variation there may be in such price. It is also apparent that in the case of very inactive stocks it might impose a long wait on consummation of the odd-lot transaction if the method were followed of waiting for the next sale of a full lot on the New York Stock Exchange to determine the price at which the odd-lot transaction should be made. Sometimes individual and inactive issues do not sell in full lots for days at a time. In such a case the closest approximation of a fair price for odd-lot transactions is found in the only actual market quotations existing for full-share lots, and that is in the bid and asked quotations for such a stock.

Determining Odd-Lot Prices on Inactive Stocks

If the prospective odd-lot trader is trading in an inactive issue and does not want to wait for a 100-share sale to be recorded on the Exchange, he may give his order with the stipulation that it be executed at once. In such case the odd-lot trader ascertains the bid and asked prices for full lots and bases his odd-lot price on those quotations. The odd-lot house will sell to a customer at the higher, or asked, price, and will buy from a customer at the lower, or offered, price. It would not be fair to base the odd-lot price on inactive stocks on the last price for a full lot, since the last sale might have been made several days previously, and the bid and asked quotations are therefore much more representative of price conditions at any certain time than is the price of the last sale.

Danger of Poor Execution

In very inactive stocks it is dangerous to enter an order for an odd-lot trade on an immediate execution basis. The less active the stock, of course, the wider the margin, or "spread," between bid and asked quotations. An inactive issue, for instance, might be quoted 57-65, or 57a65, or 57 to 65, any of which would mean that the highest bid price of prospective buyers is

57, while the lowest asked price of prospective sellers is 65. No transaction can actually take place, of course, until the bid and asked prices are at one and the same figure, or until both buyer and seller agree to the transaction at the same price. As no sales are made, the seller is likely to get more anxious to make his sale and reduce his asked price while the buyer is likely to get more anxious to make his purchase and so raise his bid price. Eventually the two meet and a sale is recorded at a mean price, of perhaps 61, in this instance.

If the buyer of an odd lot had entered his order to be executed at once, while the quotation was 57 to 65, he would have been forced to pay the offered price of 65, or four points above the next actual sale of a full lot. Conversely, if the seller of an odd lot had entered his order to be executed at once he would have received only the lower, or bid, price of 57, which would be four points less than he would have received had he waited for the next sale of a full lot. Unless instructed to execute an odd-lot order at once, however, the odd-lot dealer will not usually execute at the bid or asked prices when they are far apart but will wait for the next 100-share sale and make his execution $\frac{1}{8}$ or $\frac{1}{4}$ away from that price.

Orders at Opening or Closing

Orders to buy or sell odd lots of stock are often given "at the opening," or "at the close." In the former case, execution is made $\frac{1}{8}$ or $\frac{1}{4}$ point away from the opening sale of the stock named. In the latter case execution is made on a basis of the final bid and asked prices, as in the case of "at once" orders cited above. Orders for odd-lot execution at the opening or at the close are generally placed in active stocks, however, so there is little danger of the odd-lot transaction being made at a price very far from the last or next actual sale of a full lot.

The Split Opening

This fact is responsible, however, for confusion in case of an odd-lot order for execution at the opening, when the stock in

question is so active that there are two or more opening prices in full-lot transactions. If buying and selling orders in an active stock have accumulated to large volume overnight, the opening sales in that stock may take place at different prices, at almost the same instant, and at separate points in the "crowd" about that particular stock's post. Such a situation is termed a "split opening," and is printed on the ticker as one total transaction. Thus, if at the opening there were three simultaneous transactions in United States Steel common stock, involving 1,000 shares at $196\frac{3}{8}$, 500 shares at $196\frac{1}{2}$, and 3,000 shares at $196\frac{5}{8}$, the first transaction in Steel recorded by the ticker would probably read, "X- $196\frac{3}{8}$ to $196\frac{5}{8}$."

Such a split opening creates confusion for the odd-lot dealer if he has orders to execute at the opening in Steel. In such a case, however, the largest odd-lot representatives usually get together and quickly decide among themselves on a "fair opening" price for Steel, which would probably be $196\frac{1}{2}$ in this case. The odd-lot dealers then execute their various odd-lot orders at the usual $\frac{1}{4}$ of a point away from this fair opening price, since United States Steel is a "quarter stock."

Limited Odd-Lot Orders

The treatment of "limited" orders in odd lots is also deserving of our attention. We have previously seen that orders may be given not merely "at the market" but also with a variety of limitations. If specific price limits are included in an odd-lot order, the order is not executed until the full-lot price has gone beyond the limit price by the amount of the odd-lot dealer's margin of execution, be it $\frac{1}{8}$ or $\frac{1}{4}$ of a point.

For instance, an order to buy 25 Steel at $190\frac{1}{8}$ would not be executed until Steel sold in full lots at or below $189\frac{7}{8}$, because Steel is a quarter stock. Likewise, an order to sell 25 Steel at $190\frac{1}{8}$ would not be executed until Steel was selling in full lots at or above $190\frac{3}{8}$. In the former case, if full-lot transactions in Steel were reported at $192\frac{1}{2}$, $191\frac{1}{2}$, 190 and $188\frac{1}{2}$, the odd-lot order to buy at $190\frac{1}{8}$ would not be executed until the last price

was reached, and would then be executed at the limit price of $190\frac{1}{8}$, and not at $188\frac{3}{4}$ as might be supposed.

Likewise, in the case of the order to sell 25 Steel at $190\frac{1}{8}$, there might be full-lot transactions of $188\frac{1}{2}$, $189\frac{1}{2}$, $190\frac{1}{4}$ and 192. Here, the order to sell the odd lot could not actually be executed until the last price had been reached and the odd-lot sale would then be executed at the limit price of $190\frac{1}{8}$, and not at $191\frac{3}{4}$ as might be supposed.

Importance of Opening Prices

The more logical practice holds, however, for opening prices. Going back to our first example of the order to buy 25 Steel at $190\frac{1}{8}$, if Steel had closed the day the order was given at the third price quoted, 190, instead of at the fourth price, $188\frac{1}{2}$, the sale would not have been executed that day. If the opening price of Steel the following morning had been the fourth quotation, $188\frac{1}{2}$, then the odd-lot purchase would have been executed at the seemingly more reasonable figure of $188\frac{3}{4}$, instead of at the exact limit price of $190\frac{1}{8}$.

If, however, the opening price had been the same as on the previous close, 190, and the price of $188\frac{1}{2}$ had come on the second sale of the day instead of the opening sale, the odd-lot price-fixing practice would have reverted to the limit method employed in the previous day's example and the odd lot would have been purchased at the limit price of $190\frac{1}{8}$.

Likewise, in the case of our second illustration to sell Steel, if the price of full-lot transactions had ended the day previous at the third price in our series, $190\frac{1}{4}$, the odd-lot sale at the limit of $190\frac{1}{8}$ would not have been executed that day. If, on the following morning, however, Steel opened at the fourth price, 192, then the 25 shares of Steel would be sold at the more advantageous price of $191\frac{3}{4}$, instead of at the limit price of $190\frac{1}{8}$.

An Involved Point of Practice

Once more, however, if the opening price had been the same as the closing price the night before, $190\frac{1}{4}$, and had jumped to

192 on the second sale, instead of the opening sale, the opening practice in fixing odd-lot prices would not prevail, and the 25 shares would be sold at the limit price of $190\frac{1}{8}$ as previously explained.

This somewhat involved point of actual odd-lot practice at first appears highly illogical and is responsible for many complaints. The customer who entered a limit order and got the benefit of a wide and sudden price change at the opening one day, and then failed to get a more advantageous price than his actual price limit, under similar circumstances but after the opening, on another day, is likely to feel that there is something "phoney" about it all. In point of fact, there is nothing discretionary about the practice at all. It is simply an iron-clad rule of odd-lot practice and must be abided by.

From a fundamental and logical standpoint, it is merely another point of protection for the odd-lot dealer. Before the market opens in the morning he has plenty of time to match his limited buying and selling orders and can adjust his position to suit himself on the first sale of the particular stock in question. He can therefore give his clients the benefit of any sharp change in opening price from the previous night's close.

Protection for the Odd-Lot Dealer

During the day, however, he has his odd-lot limit orders on his books at certain prices and is counting on those exact prices to protect his position in case of any sudden change in price during the heat of trading. He cannot always keep his position at the ideal state. He must fill any and all orders accepted at certain set prices of the following sales in full lots. Since he uses such limit orders to protect his position he cannot give the customer the benefit of such sudden changes in regular trading as he can at the opening, and the customer must be satisfied to accept his execution at the limit price set by himself.

The practice amounts merely to either giving the customer execution at his own set price or better, so the customer never loses by this practice. He merely gains once in a while, through

the ability of the odd-lot dealer to be generous at the opening. He should not complain, therefore, when the dealer finds it impracticable to continue his generosity and gives the customer execution at exactly the price which he himself set as the limit he was willing to pay.

Profiting by Knowledge of the Law

In any case, there is nothing to do but to "know the law" and abide by it. The practice makes it advisable, of course, to place limit orders on odd lots after one day's close and before the next day's opening. For if this is done nothing can be lost in execution of the order, whereas the customer receives the advantage of any "break" in his favor, which he does not receive if his order is received by the odd-lot broker after the first sale for the day has been made in that particular stock.

Time Limits on Odd-Lot Orders

Odd-lot orders may be given with time limits also, just as are full-lot orders. For instance, if a limited order is given "good today only" and is not executed that day the order is automatically cancelled at the close of that day. The same holds true of orders "good till Friday," "good this week," "good this month," etc., as well, of course, as orders given G.T.C., or "good till cancelled."

Stop orders are executed as soon as the prices of full-lot transactions touch the absolute price of the stop, but the price at which the odd-lot execution is made is still $\frac{1}{8}$ or $\frac{1}{4}$ point away from the full-lot price which put the stop order into execution. We shall explain this particular phase in greater detail under the subject of stop orders.¹

We have now reviewed the particular considerations which are singular features of the trading in odd lots. In all other ways the buying and selling of stocks in less than 100-share lots is exactly the same as trading in the usual Stock Exchange unit of

¹ See Chapter XX, p. 487.

100 shares or multiples thereof. It is needless to call the reader's attention to the tremendous increase which has taken place in odd-lot trading since the World War and especially within the past couple of years. The man in the street knows that "the public has been in" the market as never before. And the "public" is composed of the millions of men in the street, and such millions cannot afford, on the average, to buy and sell stocks in blocks of 100 shares, involving thousands of dollars of capital, but they do buy small blocks of stocks in odd lots of 50, 25, 10, and even only five shares.

Efficiency of Odd-Lot Houses

It is to the credit of the odd-lot houses of the New York Stock Exchange that they have handled their increased business generally in their usual highly efficient and satisfactory manner. There are complaints of poor execution in the odd-lot business but it is doubtful if they are any more numerous, comparatively, than complaints of poor execution in full lots. In any case, the odd-lot houses have been more severely taxed than the full-lot commission brokers by the tremendous volume of trading, the excitement, the spectacular fluctuations, and late tickers and other trappings of our "big markets" of recent years, and in the stress of some days such as we have witnessed the best systems devised by man could not have secured executions which would be wholly satisfactory to anyone.

There are no truly reliable figures available on the volume of stock traded through the odd-lot houses, for the simple reason that the New York Stock Exchange does not gather or publish such statistics and neither do the odd-lot houses themselves. Since most of the sales of an odd-lot house are "balanced" by purchases, it is apparent that only when the odd-lot broker has to enter the full-lot market to balance his account in any stock will any portion of his trading volume in that stock appear on the ticker and thus become a part of the official volume figures for that day's trading on the New York Stock Exchange. The total of daily sales on the New York Stock Exchange, therefore,

takes no cognizance of the tremendous volume of "balanced" sales and purchases of the odd-lot houses in the stocks where only full-lot transactions are thus recorded by the Stock Exchange authorities.

Volume of Odd-Lot Trading

The most widely accepted estimates for additional volume of transactions on the New York Stock Exchange resulting from such balanced trades of the odd-lot houses are around 25 per cent. over the daily volume regularly reported by the Exchange. The figure appears to be a fair one though there is no way of proving or disproving its accuracy at this time. The percentage probably runs much higher than that on some days of trading but in general it is the opinion of the author that the percentage volume runs generally under that figure, as regards total number of shares dealt in and total value of stock traded. On one of the days of heavy trading, following the Stock Market Panic of 1929, reliable estimates placed odd-lot orders at between 4,000,000 and 5,000,000 shares. One house alone reported nearly 2,000,000 shares of odd-lot business in a single day.

Minimum Orders Accepted by Brokers

There has been a growing tendency among the regular brokerage commission houses to raise their minimum limit on the number of shares which they will purchase for their customers in any single transaction. The days when a large brokerage house would gladly accept an odd-lot order for only five shares of stock are pretty well a thing of the past. Most large houses now set their minimum order at 10 shares, though there are plenty whose minimum is 25 or 50 shares, this minimum applying, of course, to the general stocks selling at normal prices and not to the comparatively few stocks selling in the three and four hundreds.

In these latter high priced stocks brokers are generally willing to accept orders for only a few shares. There have also

been times in recent months when general volume of trading, and therefore the income of brokerage houses, has slumped off enough to indicate that the brokerage fraternity might be glad enough to welcome any additional business, even in lots of 10 and five shares once more, and the day may conceivably return when many of the currently discriminating houses will once more be glad to accept small orders.

The 10-Share Unit Market

In all of the discussion of odd-lot trading in which this chapter has indulged it has been assumed that stocks listed on the New York Stock Exchange may be traded in units of only 100 shares. This holds true of by far the great majority of issues thus listed and with almost all active and important stocks. However, it must be recorded that in 1927 such regulations were modified to the extent that there is now a definite list of stocks on the New York Stock Exchange in which the unit of trading is 10 shares and not 100 shares. This list is subject to change, of course, but an approximate record of such stocks will be found in Appendix E, on page 809.

For many years there was active propaganda for such an "odd-lot group," to accommodate trading in a selected list of stocks whose prices were too high or whose capitalization was too small to make practicable the dealing in full 100-share lots. In response to such need the Stock Exchange, on January 3, 1927, established its inactive list, or odd-lot trading section. Here are traded shares of the particular stocks listed in this group, in official trading units of 10 shares, instead of 100 shares. With such stocks, bidding for 10-share units and their multiples is carried on in much the same way as bidding for the 100-share lots of the main body of stocks.

The transactions and all other details of the inactive list are handled in similar manner to trading in inactive or "book" bonds, bids and offers being listed on cards and filed by Exchange attendants according to time of their receipt. This section of the Exchange has one post all to itself. Regular

brokers may transact their business at the inactive post, but such business is still often given to the odd-lot houses or the specialists who are in closer touch with the inactive and odd-lot market.

Records of transactions made in the inactive list are recorded on the Stock Exchange ticker tape and they are officially recorded by the Exchange. Out of the total of around 1,300 individual stock issues listed on the New York Stock Exchange only about 300 are on this inactive list. All the rest, including, of course, the more active and more important issues, are traded only in units of 100 shares and their odd lots are therefore handled through the regular odd-lot channels and with the regular odd-lot machinery and methods described in this chapter. It is for this reason that to all intents and purposes the unit of trading on the New York Stock Exchange is 100 shares.

CHAPTER XI

BROKERS' LOANS

Result Chiefly of Marginal Trading

Brokers' loans are, as might be inferred without any great stretch of the imagination, loans made to brokers for their use in the stock market. In a more specific sense, however, they are loans made to the customers of stock brokers and commission houses, for the brokers are merely the agents of their customers in borrowing money for them with which to carry the customers' securities on margin. If all of the customers of brokerage houses who bought securities purchased such securities outright, that is, paid for them in cash or its equivalent, there would be no need for brokers' loans.

But one of the elements of modern business, whether it be the ownership and holding of a radio, a house and lot, a private factory, or a stock certificate indicating part ownership of a great organization of productive property, is the use of credit on such ownership. We have previously seen how securities are purchased and sold on margin.¹ We have seen that the underlying factor in such margin trading is the important element of credit.

We have watched Mr. Angell of Los Angeles buy his 100 shares of American Can at a price of 140, involving a total purchase price of \$14,000. We have also seen that Mr. Angell had only \$4,000 on deposit with Leland & Company, his broker. Mr. Angell was adjudged the rightful and legal owner of that stock, however, through the service of his broker who arranged to borrow the balance of \$10,000 to finance the total purchase price of \$14,000. The broker used Mr. Angell's stock thus purchased as security for the loan which helped to pay for the stock.

¹ See Chapter VIII.

Broker Makes Loan for Customer

This margin transaction of Mr. Angell's illustrates the chief source of demand for brokers' loans. Leland & Company must arrange not only Mr. Angell's loan on his 100 shares of American Can but must arrange hundreds of such similar loans for hundreds of similar customers on hundreds of different stocks and securities in a single day. And not only Leland & Company, but every other brokerage and commission house in the country must be doing the same thing for its own customers every day.

The volume of demand for such loans is therefore not surprising. No loans need be made for outright purchases, but perhaps a fair estimate would be that 75 per cent. of the securities listed on the New York Stock Exchange are held by their owners on margin, that is, through the partial medium of credit and using such securities as collateral.

Such a percentage may be considered high, but the author includes in such a figure all indirect credit involved. For instance, an individual may pay for his stock outright but he may later put his stock up with his banker as collateral for a private and personal loan which will not be included in figures on actual brokers' loans but which is none the less a utilization of credit to carry a stock listed on the New York Stock Exchange.

Likewise, a strong investment trust may purchase thousands of shares of stock outright and take such stock out of the market. But payment for the stock is made through use of funds garnered from the sale of the investment trust's own stock to investors all over the country, some of whom may buy the investment trust stock on margin or through the instrument of credit. To such an indirect extent, therefore, the securities which the investment trust purchases outright may partly be purchased on margin, even though the granting of such credit need not appear directly in the items of brokers' loan totals.

Undigested Securities

Another element in the published totals for loans to brokers is the inclusion of loans made to them for the carrying of undigested, or unsold, security issues. When a syndicate is formed for the marketing of a block of stock or bonds, each broker or banking house in the syndicate must pay for his share of the total issue which he receives for retail sale to his customers. The unsold portion of such security issues is therefore a part of the broker's frozen inventory of valuable but unsold goods and he carries such securities almost always through bank loans, or brokers' loans. The rapid rise in brokers' loans preceding the Stock Market Panic of 1929 has been attributed to such accumulation of undigested new securities as well as to passing of stocks from strong to weak (margin) accounts. Both of these factors were, of course, unhealthy indications, as was the mere fact of the rapid advance in the published totals without an equivalent advance in market prices.

The chief source of demand for such brokers' loans, however, comes from the tremendous total of just such margin purchases as Mr. Angell's. There is no doubting the active demand for such an amount of credit, therefore. The supply is available in large measure, at least, as a result of this eager demand. Credit, it has generally been taught in the past, comes almost entirely from banks. This is still true in large measure, but to a greater degree than ever before credit has in recent years come to the stock market through the instrumentality of banks, but more directly from private individuals and corporations.

Still the funds which the banks or their clients are willing to loan to the brokers and their customers depends in large measure on what price the brokers and their customers are willing to pay for the use of such funds or the extension of such credit. The greater the demand for stock market credit, the higher rates will brokers and their customers be willing to pay, and the higher the rates they will pay the greater the incentive for banks and their customers to loan available funds to the brokers and their customers.

Time Loans

The fact remains that the banks are the chief source of the credit which the brokers require in financing the customers' holdings of securities. Such financing, therefore, takes the form of brokers' loans negotiated between the brokers and the banks. These loans are chiefly of two kinds, time loans and demand loans. As might be inferred, time loans are those negotiated for a stated and comparatively long period, such as 30, 60, 90 days, or three, six, nine or 12 months. Those made to run less than 90 days are known as short-term loans, while those which run over three months are called long-term loans.

Demand Loans

Demand loans are so called because they may be terminated on demand by either the lender or the borrower. They are also sometimes called day loans because technically they run for only a single day and must be renewed each day that they remain in force. In practice the demand or day loan may run for most any length of time, but the duration of the demand loan is almost always much shorter than that of the time loan.

Collateral Loans

All brokers' loans, both time and demand, are also known as collateral loans because they have as their security various stocks and bonds to back up the promise of the borrower that he will repay the loan when it is due or when it is called. Collateral loans differ from straight commercial loans in that the latter are secured by actual goods or commodities, or the representations of ownership for such goods or commodities, or are often secured by no physical property at all, but only by the "name" or signature of the borrower. The latter type of commercial loan is known as commercial paper or name paper, and is divided into prime name paper and other name paper, the

prime name paper being secured by the signatures of individuals or corporations whose credit rating is exceptionally high.

Commercial Loans

From the standpoint of the banker, or lender, commercial loans are more attractive, other things being equal, than are collateral loans, because in this country commercial loans are rediscountable at the Federal Reserve Banks whereas collateral loans are not. In other words, a banker may take his commercial paper or commercial loans to the Federal Reserve Bank and borrow in turn on such security, since the ultimate security consists of actual physical and tangible property or the name of an exceptionally high grade and strong borrower.

But the banker who loans money to a broker cannot get a loan from the Federal Reserve Bank on such collateral loans, where the original security is made up of stocks and corporation bonds. He may do so if the security is made up entirely of Government paper or Government bonds but this is the only type of collateral which the Federal Reserve System will lend on, or rediscount.

This practice of refusing to rediscount on high grade collateral loan paper by the official Government banking system is peculiar to America since in most European countries collateral loans, as well as commercial loans, are rediscountable with the central bank. There has been considerable propaganda for Federal Reserve rediscounting of collateral loans in this country but there is also considerable opposition on the part of the Reserve Board and various banks. The matter came up once more for discussion in the summer of 1929 but no action was taken.

Collateral Loans not Rediscountable

There are good arguments on both sides of the question, though it cannot be said that in practice the European countries have found any difficulties with their method. Fundamentally, we have seen that a stock certificate is nothing but the symbol of

ownership or a portion of physical and producing properties. The paper representing such ownership would not appear to be any less strong, or less secure, than the paper representing ownership of commodities or physical properties which is used to secure commercial loans, or the name paper of commercial loans which is secured by no direct pledge of personal property at all. Refusal of the Federal Reserve System to extend rediscounting facilities to collateral loans secured by securities is perhaps based to some degree at least upon failure to consider the security certificate in the proper light, which we have learned to do. It indicates a tendency for security certificates still to be looked upon as a medium for speculation, and not as the insignia representing part ownership of physical and producing property.

On the other hand it must be admitted that the value of the security on a commercial loan, when actual physical property is directly pledged, is more easily and more definitely determined, than is the true value of collateral security. Furthermore, the Federal Reserve Banks are naturally interested in making Government securities more attractive to investors than other types of stocks or bonds, and one of the easiest methods of attaining this attraction is to accept Government bonds as security for a loan from the Federal Reserve Banks while refusing to accept other securities.

Bankers Prefer Commercial Loans

The result of this discrimination on the part of the Federal Reserve Banks in favor of commercial loans and against collateral loans is that the banker, other things being equal, will prefer to lend his money on commercial loans rather than on collateral loans, since he can rediscount the former in raising new credit but not the latter. The final result, therefore, is that the collateral loan must make itself more attractive as to interest offered the banker, than the commercial loan. The interest rates on collateral loans are thus at a higher level, in general, than the rates on commercial loans.

Since commercial loans are generally used for financing com-

mercial transactions, and since collateral loans are used generally for financing security and stock market transactions, our interest may center itself upon the latter type. We have seen that both time and demand collateral loans are secured by collateral in the form of stocks and bonds which are being carried through the proceeds of the loan for which they are put up as collateral. The \$10,000 which Leland & Company were forced to borrow for Mr. Angell to help pay for his \$14,000 purchase of American Can was one of many such loans which the broker had to arrange for his customers. Instead of making an individual loan for each of such transactions, the broker will try to supply all of his customers' needs through the medium of perhaps a half dozen large loans.

He therefore "bunches" the securities of his customers which he must pledge for such loans, and places them in what is known as his "loan envelope" for each individual loan which he will negotiate. The market value of the stocks in the loan envelope, to be used as collateral or security for the loan, must total not merely the amount of that particular loan but must be worth, according to current market prices for the securities included, from 25 per cent. to as much as 50 per cent. over the face value of the loan.

The Broker's "Margin"

This is the fundamental reason for the broker's demand that his margin customers put up 30 per cent. or more cash, or margin, on the value of their stocks. In discussing margins we have previously seen that Leland & Company demand that Mr. Angell's margin be kept at around 30 per cent. of the value of his stock carried on margin, to protect Leland & Company against loss through sudden decline in the value of Mr. Angell's security. For exactly the same reason the bank from which Leland & Company borrow the money to finance Mr. Angell's American Can stock will demand that Leland & Company put up as collateral a value of stock about 30 per cent. higher than the amount of the loan, as a protection for the banker against sudden decline in the market value of such collateral.

In other words, Leland & Company will only be able to borrow for Mr. Angell the \$10,000 which he needs to complete his purchase, even though the value of the 100 shares of American Can which Leland & Company put up as collateral is \$14,000. That is essentially the reason why Leland & Company demand that Mr. Angell pay \$4,000 on the stock in cash and borrow only the remaining \$10,000. Once more, it is seen that the broker acts really merely as an intermediary, or an agent, in making the loan for his customer.

Likewise, if the market value of such collateral in the loan envelope should decline, Leland & Company will be expected either to put up more collateral or reduce the loan. This, in turn, is the fundamental reason why Leland & Company will pass such a demand on to their customer, Mr. Angell, and demand that he put up additional margin, or cash, in case of a decline in the value of his stock. By receipt of such additional margin from Mr. Angell, Leland & Company can reduce the loan and satisfy the demands of the bankers.

Direct Negotiation for Time Loans

Both time and demand loans are secured in much the same way, by the loan envelope which carries the securities put up as collateral. Time loans, however, are not made through the instrument of the New York Stock Exchange facilities as are demand loans. Time loans result from direct negotiations between the banker and broker, or through the services of a third party, the money broker, who charges a small commission for negotiating such a loan. When such negotiations are completed all that remains is for the borrowing broker to make up his loan envelope containing all of the securities which he puts up as collateral for this particular loan.

He then makes out his time loan agreement, similar to a personal note, attaches the collateral envelope and dispatches both to the loaning bank. The bank checks and inspects the collateral in the loan envelope to make sure it is all there, checks the total current market value of such security, and, if the security is ac-

ceptable, takes the broker's note, keeps the collateral as security and sends back to the broker a check for the amount of the loan. Time loans may be renewed, of course, from one maturity date to the next, if acceptable to both borrower and lender.

The collateral which Leland & Company put up for the loan, part of which is to finance Mr. Angell's American Can stock, probably includes that stock but that is not necessarily the case. It will be remembered ¹ that when Mr. Angell opened his brokerage account with Leland & Company he gave the broker the right to pledge his margin stock for any loan, to substitute such stock, to rehypothecate, or reloan, it and do with the stock about as the broker pleased, provided always that until it was sold and Mr. Angell's loan was discharged the stock would be held in his name and for his sole risk. Acting on such an agreement, Leland & Company may lend Mr. Angell's stock to another broker who happens to be short 100 shares of Can, he may deliver it for one of his clients who has gone short of Can, he may include it in another loan envelope or use it to advantage for himself in various other ways, but the stock certificate still stands in Mr. Angell's name and is, to all intents and purposes, Mr. Angell's property.

Foreclosing a Time Loan

If the market value of the collateral pledge by a broker for his time loan drops below the value of his loan, we have seen that the lender will demand that the loan be reduced or additional collateral be put up to bring the total value of the collateral back up to a point about 30 per cent. above the loan figure. There is no quibbling over such demands between the broker and his loaning bank. The market value of the collateral in the loan envelope is at all times known definitely by both parties, and quite often the broker will send additional collateral to his loaning banker even before he asks for it, knowing full well that such demand would not be long in forthcoming from the banker, if the market value of the loan collateral is impaired.

Part of the time loan agreement states that if the market value

¹ See Plate 6. Chapter III, p. 45.

of such collateral is allowed to decline below the margin agreed upon, then the loan automatically becomes immediately due and payable. If upon such an occasion the lender demands payment of the loan and it is refused by the borrower, then the lender is empowered to foreclose upon the collateral in his possession. The banker would therefore immediately sell the securities in the loan envelope, retire the loan and remit the remaining proceeds, if any, to the borrowing broker. In practice, of course, the borrowing broker sees to it that his margin is always up to the percentage agreed upon since he does not wish to have his collateral foreclosed and sold out on him.

In repaying a collateral time loan at maturity the borrower dispatches to the loaning bank his check for the amount due and his collateral is thereupon returned to him. The interest due is paid either at the beginning or the end of the loan. If at the beginning, then the borrower receives the face amount of the loan, less the amount of interest due for the time of the loan. If at the end, then the borrower adds the amount of interest due to the face amount of the loan in making out his check to retire the loan and redeem his collateral.

The Call Loan

The call, day or demand loan is peculiar to American stock trading, due to the American practice of daily settlements. In Europe the practice of term settlements is fairly general, delivery and payment for all transactions in the securities markets being made all at once at the end of weekly, fortnightly, or even monthly periods. Such set periods of adjustment, clearing, payment and delivery are called settlement dates. If a stock is purchased just after one settlement date then it is not received, and therefore payment is not made on it, until the date of the next settlement.

We have previously discussed the relative merits of daily and term settlements in connection with the delivery of the actual stock certificates and the Clearing House operations.¹ Now we

¹ See Chapter V, p. 86.

may consider the question from the opposite standpoint of the payment in cash or credit for the stock certificates thus delivered. Under the European plan of term settlements the broker does not have to receive and pay for any stock purchased until settlement day. From that day to the next settlement day his position remains theoretically the same. He needs to readjust his credit position, therefore, only every settlement date, or every week, or fortnight. For that reason he can use the more stable form of collateral time loan in financing his stock and security dealings.

In the United States, however, we have seen that daily settlements are the rule, that is, that all stock sold one day is delivered, and payment therefor received, on the following day before 2:15 P.M. Likewise, all stock purchased in one day's trading must be received, and payment made therefor, before 2:15 P.M. the next day. Since payments for traded stock are being made and received every day in this country, instead of every fortnight abroad, it is clear that the broker's credit position changes every day in this country instead of every fortnight as is general in Europe.

Daily Settlements Need Daily Loans

This is the prime reason for the call, day or demand loan in the United States. Daily settlements call for such daily readjustment of brokers' loans and demand therefore a highly variable credit scheme which will allow loans to be called for payment by the lender, or paid off by the borrower, not every fortnight but every day. In essence, this is the only difference between the call loan and the time loan. The call loan may be terminated on demand by either borrower or lender. Since theoretically a loan may not be called before its maturity, all demand loans must mature each day. They are therefore either paid off or renewed each morning of their life. Notice for return loans through the Stock Clearing Corporation are filed not later than 12:15 P.M.

As regards the listing and putting up of collateral the demand loan is made up about the same as the time loan. The borrow-

ing broker lists the securities comprising his collateral to be held by the lender for security, on the face of the loan envelope, noting the total market value of such securities, which must, as in the case of the time loan, show a margin of 30 per cent. or more over and above the face of the loan. He then places such securities inside the loan envelope and dispatches it to the central meeting point of banker and broker, often the Stock Exchange Clearing House, where the banker reviews the collateral, checks it, and if it is acceptable credits the amount of the loan to the borrower.

General Loan Agreement

In the case of the demand loan it would require too much time and energy to draw up a separate agreement for each individual loan, as is done in the case of a time loan, so that the terms of the loan contract for demand loans are drawn up to cover all such loans negotiated between a certain broker and a certain banker. Leland & Company would have such a demand loan contract on file with perhaps a dozen banks from whom they habitually borrow for daily credit needs, while any individual bank would have on file such demand loan contracts with perhaps several hundred brokerage houses to whom it regularly loans funds on demand.

The demand loan contract, or general loan agreement, is similar to the time loan form, including the protection for the lender previously noted; namely, that if the borrower's margin falls below the percentage agreed upon, the lender may call the loan and, if it is not paid, may foreclose on the collateral and sell it out in the open market, or privately or at auction, to retire the loan.

The contents of the loan envelope are important, both to the borrower and lender. They are perhaps more important, however, to the lender, for they represent his security for repayment of the loan, and thus stand between him and possible loss of his loan. In order that he may at all times know the exact market value of his security, the lender prefers to have only the most active securities. Besides knowing their value more continuously

he can sell them in foreclosure more readily, in case the borrower should default. It is not an iron-clad rule but the banker much prefers to find in his loan envelope only securities which are listed on the New York Stock Exchange. Certainly he will demand that they constitute 85 or 90 per cent of the total value, the rest con-

To induce The 100th National Bank of New York (hereinafter called the Bank) to make loans from time to time to the undersigned or any of them, or to continue loans already made, the undersigned jointly and severally agree that in addition to any rights which the Bank would otherwise have against the undersigned or any of them, or his, its, or their executors, administrators, successors or assigns, the Bank may hold all property, which term is used herein to include securities, merchandise, funds, accounts, choses in action, shipping documents, and any and all other forms of property, or evidence of property, whether real, personal or mixed, and any right or interest therein, now or hereafter pledged with the Bank by the undersigned or any of them, as collateral security for the payment of every such loan or loans as well as for the payment of every other obligation or liability, direct or contingent, of the undersigned or any of them to the Bank, due or to become due, whether now existing or hereafter arising; and the undersigned will each and all of them deliver to the Bank additional property, or make payments on accounts to its satisfaction, should the market value of the said property as a whole, suffer any decline; or, upon demand, deposit with the Bank approved collateral securities as security for any or all of such obligations or liabilities of the undersigned or any of them to the Bank. The undersigned and each of them hereby give to the Bank a lien for the amount of any and all of the said obligations and liabilities of the undersigned, or any of them, to it, upon all the property now or at any time hereafter in the possession of the Bank or of any third party acting on its behalf, for the account of the undersigned or any of them, whether coming into such possession for the express purpose of being used by the Bank as collateral security, or for any other or different purpose, including such property as may be in transit by mail or carrier for any purpose, or covered or affected by any shipping documents in the Bank's possession, or in possession of any third party acting on its behalf.

On the non-performance of this promise, or upon the non-payment of principal or interest of any of the obligations or liabilities above mentioned, or upon the failure of the undersigned forthwith, with or without notice, in case of decline in value of said property as a whole, to furnish satisfactory additional property, or to make payments on account, or on demand to deposit approved collateral securities as herein provided, or in case of the filing of a petition in bankruptcy by or against the undersigned, or any of them, or upon the application for the appointment of a receiver for, or upon the application for a writ of attachment against, any of the property of the undersigned, or of any of them, or in case of the failure in business of, or the commission of any act of insolvency by, the undersigned, or any of them, then and in any such case, all obligations and liabilities, direct or contingent, of the undersigned and each of them, shall thereupon become due and payable without demand or notice; and full power and authority are hereby given to the Bank thereupon to appropriate and apply upon such obligations or liabilities or any of them, any or all of said property, or any property substituted therefor, or added thereto, or any other property of the undersigned or any of them, as above described, and to sell, assign and deliver the whole of the said property, or any part thereof, at any broker's board, or at public or private sale, at the option of the Bank, either for cash or on credit, or for future delivery, without assumption of any credit risk, and without either demand, advertisement or notice of any kind, all of which are hereby expressly waived. At any such sale, the Bank may itself purchase the whole or any part of the said property sold, free from any right of redemption on the part of the undersigned and each of them, who hereby release the same. In case of any sale or other disposition of any of the property aforesaid after deducting all costs or expenses of every kind for care, safekeeping, collection, sale, delivery, or otherwise, the Bank may apply the residue of the proceeds of the sale or sales or other disposition of the property, in full or partial payment of one or more or all of the said obligations or liabilities to it, whether except for this agreement such liabilities or obligations would then be due or not, making proper rebate for interest on obligations or liabilities not otherwise then due, and returning the overplus, if any, to the undersigned, who agree to be and remain liable, jointly and severally, to the Bank upon any of the said liabilities or obligations or any part thereof not satisfied by the proceeds of such sale or sales or other disposition. The Bank is hereby authorized at its option, at any time, whether the property held as security is deemed adequate or not, to appropriate and apply upon any of the said obligations or liabilities, whether now or hereafter existing, and whether then due or not due, any and all moneys now or hereafter in the hands of the Bank, on deposit or otherwise, to the credit of or belonging to the undersigned, or any of them.

The Bank may assign or transfer this instrument, or any instruments evidencing all or any of the obligations or liabilities hereinbefore mentioned, and may deliver the said property or any part thereof to the transferee or transferees, who shall thereupon become vested with all the powers and rights in respect thereto given to the Bank herein or in the instruments transferred; and the Bank shall thereafter be forever relieved and fully discharged from any liability or responsibility with respect thereto, but the Bank shall retain all rights and powers hereby given with respect to any and all instruments, rights or property not so transferred. No delay on the part of the Bank or any assignee or transferee of the said Bank hereunder, in exercising any rights hereunder, shall operate as a waiver of its or their rights.

This agreement applies to all future as well as to all existing transactions between the undersigned and each of them and the Bank, and shall not be affected, impaired or released by the death of any of the undersigned, or by the death, resignation or addition of any partner.

New York

November 4th 1929

L10-1M-PS

Selander & Company

PLATE 44. THE GENERAL DEMAND LOAN AGREEMENT

To cover all demand loans made between the bank and broker, with specifications relating to collateral, margin, etc., to protect the loaning bank.

sisting of strong and active securities, either listed on the New York Curb Exchange or some other exchange of good standing. Under certain unusual circumstances the lender might accept an unlisted security, that is, one that is not regularly traded on any formal stock exchange, but the security would have to be one of outstanding value or marketability.

The Loan Envelope

The banker would usually prefer active bonds to active stocks in the loan envelope, because they are considered better security and because their market values do not fluctuate so rapidly as stocks. Since brokers' loans are used more to finance stock than bond purchases, however, the broker prefers to include as large a proportion of stocks as possible. In many cases the loan envelope may contain nothing but stocks, though in perhaps the majority of cases a small percentage of bonds are included. Previously the lender looked with dissatisfaction on a loan envelope without some bonds, but the ready marketability, the growing value and the unquestioned security of strong stock issues today have largely done away with such a decided prejudice.

In the case of stocks the lender almost always discounts any collateral in less than full lots, since it is unwieldy and often more difficult to realize upon. In May, 1924, arrangements were made by the Stock Clearing Corporation with the principal lending banks by which call loans secured by odd lots of stock may now be negotiated through the money clerk on the floor of the Exchange at one-half of one per cent. above the ruling rate for full-lot collateral loans.

Mixed Collateral

The loan collateral is said to be "all rail," or "all industrial," as it contains only railroad stocks and bonds, or only industrial stocks and bonds, respectively. The "regular" loan collateral consists of both railroad and industrial securities and is called a "mixed collateral" loan. The proportion of railroad to industrial securities in the regular or mixed loan envelope has been steadily on the decline, and quite naturally, in recent years, as public interest and number of shares listed has veered from a majority of railroad securities to a wide margin in favor of industrial securities, especially industrial stocks.

The margin of collateral value over face loan value demanded

by the lender is conditioned by the credit standing of the borrower and the quality of the collateral offered. When a loan is being negotiated the lender agrees to such loan on the condition that the collateral presented is satisfactory. If, upon presentation of such collateral, therefore, the prospective lender finds it unsatisfactory, he may refuse the loan, demanding changes in individual securities of the loan envelope, or refusing to accept the entire envelope. The borrower may then try for the loan elsewhere on the same collateral or make the changes suggested by the prospective lender.

Negotiating the Call Loan

We may now look more closely at the method of negotiating call loans. We have seen that brokers' time loans are negotiated directly, or nearly so, between broker and banker. With the tremendous volume and rapidity of turnover in call loans, however, this would involve too much time and energy. The old principle of "creating a market" where buyers and sellers can come together and transact their business at one central point has solved this problem just as similar treatment has done away with wasteful methods of buying and selling stocks, borrowing and lending stocks, paying for and delivering stock certificates, etc.

In this case, the market has been made where buyers of credit and sellers of credit can get together at a central meeting place and negotiate their business. The market place for credit was formerly the "money crowd," on the floor of the Stock Exchange.¹ Here would gather the buyers and sellers of credit, and loans would be traded, or negotiated for, in much the same way as in regular stock market transactions. If there were more buyers, or borrowers, the price, or interest rate, went up. If there were more sellers, or lenders, the interest rate went down.

During the huge credit strain incidental to the World War, however, leaving the call loan market to the unstable and irre-

¹ See Chapter II, p. 30.

sponsible vagaries of the "money crowd" operation became impracticable, and steps were taken which led to establishment of what is now known as the "money desk." The clerks at this money desk receive, during each day's trading, the requests for call loans from the various representatives of the New York Stock Exchange member firms, who have received their orders direct from their commission house office. Also throughout the day the money desk is receiving offers of loanable funds in exactly the same way. These loanable funds do not originate with the brokerage houses who offer them at the money desk but originate with the loaning banks themselves. The banks, however, are not members of the Exchange, so in order to negotiate loans on the Exchange they must employ the services of the commission house members.

Originating the Supply

Each morning the heads of banks all over the country, and even abroad, calculate the amount of free money which they may safely loan out of their surplus for that day. The banker in London may cable instructions to his New York correspondent to lend his balance out on call that day. The small country banker may place funds, or already have them on deposit, with the mid-Western central bank of his community for use in the call money market. The larger bank thus adds these small amounts to whatever balance it can itself spare for use in the call money market that day and wires this total credit to the New York correspondent for use in the call market.

Thus perhaps about a dozen large New York banks accumulate such funds for call loan use from smaller sources all over the country, add such funds to whatever they have decided they can loan on call for that day and telephone their instructions to negotiate the total amount of such call loans to the broker who habitually handles their call loan account. The large city banker is likely, also, to split up his total credit for safety's sake, and distribute it among two or three brokers, for loaning on the Exchange, just as the broker may split up his own credit demands

for the day into a number of separate demands, thus making more probable several different banks as his lenders for that day's accommodation and making less probable the calling of all loans on such accommodation at once.

In any case, the broker receives instructions from the banker to offer his funds on call in the morning, as soon as the banker has found that he will have surplus funds to lend. The broker

Form L.D.-9

New York March 6 1930

The undersigned hereby applies to **HUNDRETH NATIONAL BANK** for a loan of One Hundred Thousand Dollars (\$ 100,000.00), to be credited to the account of the undersigned, upon the terms and conditions below stated, and to be repaid at or before the close of business this day. The avails of the said loan shall be received and used by the undersigned only for one or both of the following purposes: To pay, in whole or part, the purchase price of, and thus to obtain certain securities which the undersigned has contracted to purchase and receive; or, to pay in whole or part, another loan or other loans heretofore made to the undersigned, and thus, to release certain securities held as collateral to such other loan or loans. The undersigned, as trustee for the Bank, shall obtain possession of the securities aforesaid; and shall deliver, or cause to be delivered, the same to the Bank, as security for this loan, before the close of business on this day, unless in the meantime the amount of this loan shall have been repaid to the Bank. The undersigned may, however, before the close of business this day, sell or transfer, for cash or its equivalent, or pledge for money contemporaneously loaned, or exchange for other securities, any or all of said certain securities, but the proceeds of such sales, transfers and pledges, shall be received by the undersigned as trustee for the Bank, and shall be delivered by the undersigned to the Bank before the close of business this day where they shall be credited in payment *pro tanto* of said loan, and the securities received in exchange shall be in all respects charged with the same trust, and subject to the same rights of the Bank to possession, and otherwise, as herein provided in respect of the certain securities so exchanged.

The undersigned, as further security to the Bank hereby assigns to the Bank, its successor and assigns, all of the right, title and interest of the undersigned to and in the certain securities hereinabove referred to, and to and in any and all claims of the undersigned against third parties now existing and that may be created this day for the purchase price, or any present unpaid balance thereof, of any of said certain securities sold or that may be sold by the undersigned, and to and in all claims of the undersigned against customers of the undersigned for the balance due or to become due this day of the purchase price of any of said certain securities delivered or deliverable to such customers.

Nothing herein contained is intended to lessen the liability of the undersigned to the Bank arising from the making of said loan; nor to impair the affect of any General Collateral Agreement given by the undersigned to the Bank; nor to confer upon the undersigned any authority to create any liability on the part of the Bank.

Leland & Company

PLATE 45. NEW LOAN APPLICATION FORM

In which Leland & Company, the prospective borrowers, apply direct to Hundredth National Bank, prospective lenders, for a loan of \$100,000.

then instructs his floor trader to offer such funds for the bank client and the floor trader reports the credit offered to the money desk. Later, all through the day, until closing, the banker may receive additional funds for call loaning from his Western correspondents, such funds often coming in late, due to the difference in time between New York and the cities further west.

Likewise, as trading progresses, the broker may find need of additional credit and will transmit his bid for such credit to the money desk through his floor trader, along with the additional funds offered by his client bankers.

Originating the Demand

If Leland & Company need \$100,000 of credit at 11 A.M. and one of their banking customers, Hundredth National Bank, telephones them to offer \$100,000 of credit in the call market, Leland & Company do not necessarily take that credit for themselves. This might often interfere with the efficient operation of supply and demand at the central money desk. Leland & Company will probably transmit to the money desk, therefore, their own request for \$100,000 of call funds, at the same time that they transmit the offer of \$100,000 for account of the Hundredth National Bank.

The small country banks pay no commissions to the larger city banks for loaning their funds on call. But they probably receive a slightly lower rate of interest on such funds than do the city banks, thus compensating the latter for their services in placing the surplus funds. The same practice applies to the city banks in the Western states who lend their accumulated surplus through their large New York correspondents. Previously, the commission houses made no charge to the New York banks for transmitting their offers of call loan credit to the money desk of the New York Stock Exchange. During the summer of 1929, however, the brokerage houses adopted rules allowing a commission of one-eighth of one per cent. as commission for the servicing of such loans.

We have now seen how both the supply and the demand for call funds meet at the money desk on the floor of the New York Stock Exchange. All that is necessary is for the clerks to match up the request with the offers, make out their slips notifying the broker from whom he may get his loan and the banker who is to get his loan, and keep the records of such transactions. These reports are then given to the floor traders who presented the offers or requests for report to their home office. The commission house, of course, reports in turn to the offering bank, advising it to whom its offered funds have been allotted.

Offices of the Day Clearing Branch

The scene now shifts once more to the Day Clearing Branch of the Stock Clearing Corporation. In our study of that Corporation we have seen how time, credit and effort were saved through clearing of actual stock certificate deliveries by the Night Clearing Branch.¹ We have also seen how the Day Clearing Branch carries on the work of saving time, credit and energy, by clearing the money balances constantly going on between the brokers. We also saw that such money clearances resulted in depleting or increasing the credit standing of the individual brokers in account with the Stock Clearing Corporation, and that the latter agency was very strict about the unwarranted granting of such credit.²

In the present chapter we have seen how the broker's call loan credit demands arise from the fact that he has to accept delivery of purchased stock on the following day and make payment for such stock. But he does not make such payment direct to the broker but through the Day Clearing Branch of the Stock Clearing Corporation. It is a simple matter therefore for the Day Clearing Branch, which is handling the broker's account anyway, as regards money received for stock delivered and money paid for stock received, to act also as agent for the broker in receiving or paying off the broker's loans which arise out of these same payments and receipts on stock exchanged through the offices of the Clearing Corporation.

A Specific Example

A definite example will perhaps serve as the best method of illustrating the details of making the actual demand loan, with the Stock Clearing Corporation acting as agent for both borrower and lender. Let us assume that the \$100,000 demand loan offered by Hundredth National Bank has been assigned to Leland & Company who have applied for just that amount of credit. Un-

¹ See Chapter V, p. 82.

² See Chapter VII, p. 119.

doubtedly the reason why Leland & Company have applied for that loan is because their contingent debit for the day on the Clearing House books is larger than their contingent credit — that is, Leland & Company are receiving a greater amount of stock in deliveries than they are delivering, and must pay out more money than they receive. They must therefore arrange this loan to bring their credits up to their debits for the day's stock payments. Since the debit and credit balances will all appear on their account with the Day Clearing Branch, it facilitates matters greatly to have this additional credit which they need, from the \$100,000 loan, credited direct to their Clearing House account by the loaning banker. And this process is further facilitated by the loaning banker's offices in connection with those of the Day Clearing Branch.¹

In any case, both Leland & Company and Hundredth National Bank have now been notified, through the instrument of the money desk, that they are to be the principals in the loan of \$100,000. All such new loans are generally made, if they are made through the Clearing House, before 2:30 P.M., and usually much earlier. Demand loans may be made ex-Clearing House, or direct between the borrower and lender, if preferred, but we have seen the advantages of making them through the Clearing House.

The New Loan Agreement

Leland & Company, as the borrowers, make out their "new loan agreement," in quadruplicate, on Clearing House forms, showing the face value of the loan, the interest rate, the securities in the loan envelope to be put up as collateral, and their total values (See Plate 46). At the bottom of the form are blanks for signatures of both Leland & Company and Hundredth National Bank. The four loan agreements are signed by Leland & Company and dispatched to Hundredth National Bank. If collateral and the other considerations are satisfactory Hundredth National Bank signs all four of the agreements, retains two to be sent to the

¹ See Chapter VII, p. 140.

agent of the bank in the Day Clearing Branch and returns the other two to Leland & Company.

Leland & Company dispatch their two copies of the loan agreement, duly signed by both parties, to their cage at the Day Clearing Branch, together with the loan envelope containing the col-

Form 011—Short-6-29—10M FOURTH ORIGINAL

STOCK CLEARING CORPORATION
(Day Branch)

Clearing No. 000

NEW LOAN AGREEMENT

New York March 6, 1930

The Hundredth National Bank has agreed to loan
this day to Leland & Company in accordance
with and subject to the By-Laws and Rules of the Stock Clearing Corporation
\$ 100,000.00 on the following securities at 6 %

	Securities	Price		Value	
1,000	<u>U.S. Steel Common</u>	150		150 000	—

1,000	<u>U.S. Steel Common</u>			150 000	—
-------	--------------------------	--	--	---------	---

Lender's check for the amount of the above loan is to be payable to the Stock Clearing Corporation and to be delivered to it.

Lender Signs Borrower Signs

Hundredth National Bank Leland & Company
John Doe, 24 W.P. Richard Roe, Treas.

PLATE 46. NEW LOAN AGREEMENT

Made out in quadruplicate by the borrower, signed by the lender and sent to the Stock Clearing Corporation which acts as agent for the two parties.

lateral securities. All that is now necessary is for the agent of Hundredth National Bank to get his collateral loan envelope from Leland & Company's cage, check the contents with his loan agreement and present at Leland & Company's cage in return for the security collateral its order on the Clearing House or the check

of Hundredth National Bank for \$100,000 made out to the Stock Clearing Corporation for credit of Leland & Company. Duplicate receipts are also signed and exchanged. This credit is then placed on the books of Leland & Company's account with the Stock Clearing Corporation, presumably to cover the contingent debit which Leland & Company have or will shortly have, as a result of paying out more on receipt of stock delivered to them than they have received for stock delivered by them through the money clearance system which we have previously studied.¹

Paying Off

In paying off such a demand loan exactly the reverse process is followed. Repayment of demand loans takes place earlier in the day, as a rule, than making of new loans, the process beginning with the opening of the Exchange trading day at ten o'clock. All notices are in by 12:15 P.M. A return loan agreement, including also an order on the Stock Clearing Corporation to pay principal and interest, is made out by Leland & Company in quadruplicate and signed, but only three copies are delivered to Hundredth National Bank (See Plate 47). They contain also the list of collateral securities, amount of loan, interest rate, etc., just as did the new loan agreement. Hundredth National Bank signs the three forms, retains one and returns the other two to Leland & Company, who deposit them at their cage of the Clearing Corporation, notifying the latter that the loan is to be paid off. Leland & Company then make out a credit memorandum for principal and interest and send this also to the Clearing House.

All that now remains necessary is for the agent of Hundredth National Bank to present the loan envelope at the cage where Leland & Company's account is kept at the Day Clearing Branch. The teller checks the collateral securities to see that they are as noted on his copies of the return loan agreement, accepts such securities for the account of Leland & Company, their owners, signs the credit memorandum, thus making it a check for the

¹ See Chapter VII, p. 118.

amount of the loan and interest, and gives this check to the agent of Hundredth National Bank, meanwhile debiting Leland & Company's Clearing House account with the amount of the credit memorandum which has now become the check by which the loan is actually paid off.

Form 05—Short-6-29—10M THIRD ORIGINAL

STOCK CLEARING CORPORATION
(Day Branch)

Clearing No. 000 Called
Returned

RETURN LOAN AGREEMENT
New York March 7, 1930

Leland & Company has agreed with
The Hundredth National Bank to pay off this day a Loan
dated March 6/30 \$ 100,000.00 and interest \$ 17.42
Total Charges \$ 100,017.42 in accordance with and subject to the
By-Laws and Rules of the Stock Clearing Corporation.

	Securities	Price	Value
1,000	U. S. Steel Common	150	150 000 —

1,000	X		150 000 —
-------	---	--	-----------

The securities held by the lender as collateral for the above loan are to be delivered to the Stock Clearing Corporation. The borrower directs the Stock Clearing Corporation to pay the amount of said loan with accrued interest and to hold said securities for his account subject to the By-Laws and Rules of the Stock Clearing Corporation.

Hundredth National Bank Leland & Company
Lender Signs Borrower Signs

The delivery to the Stock Clearing Corporation of the securities named above is hereby acknowledged.

John Doe, 24" O. P. Richard Roe Treas.
Lender Signs Borrower Signs

PLATE 47. RETURN LOAN AGREEMENT

Repaying the loan contracted in Plate 46. Made out in quadruplicate by the borrower, three copies going to the lender for signature and then to the Stock Clearing Corporation as agent.

Although call loans are often negotiated and made directly, and not necessarily through the medium of the Clearing House, the saving of time, credit and energy which is brought about through having the Stock Clearing Corporation act as the clearing agent

for both borrower and lender in making demand loans is thus readily seen. This service which the Clearing House renders to clearing members, and to the non-member banks, is called loan clearance. In our study of the services of the Day Clearing Branch we saw also how the Clearing House performs other intermediate services for the broker, between loans, or while such loans are in process of being switched from one lender to another,¹ and may well review those services briefly at this point.

Transference of Loans

If Hundredth National Bank should call the loan of Leland & Company the latter firm might arrange to transfer the loan to the Eleventh National Bank. But before the second loan was forthcoming Leland & Company would have to put up their security collateral loan envelope, which they could not get until they had the new loan from the Eleventh National Bank to repay the old loan to Hundredth National Bank and redeem the security collateral.

In such a case the Stock Clearing Corporation acts as agent for all three of the parties, giving its own check, which does not have to be certified, so strong is the Clearing Corporation's credit, for repayment of the first loan, receiving Leland & Company's collateral and transferring it at once to the new lending bank and receiving the new loan from the Eleventh National Bank to cancel its check.

Thus for a few minutes, while this process of exchange is going on, the Stock Clearing Corporation grants the \$100,000 of intermediate credit to Leland & Company, but not without security, since the Corporation holds the collateral for the old and new loans until it turns the collateral over to the new lender and receives the check for the new loan to retire the temporary or intermediate credit which it has granted.

¹ See Chapter VII, p. 139.

Withdrawing Collateral

Still another similar loan service of the Day Clearing Branch we have previously noted,¹ but may review, in connection with the machinery of demand loans. During the time between repayment of one loan and the making of a new loan, the security collateral, or loan envelope, may often remain in possession of the Stock Clearing Corporation, which holds such collateral for the account of the broker, as his agent. During this time the broker may, by observing certain rules and forms, withdraw some securities from, or put new securities in, his loan envelope. He may do both, thus making "substitutions," in his loan envelope. We have previously seen² that the broker may wish to do this for a variety of reasons, and the service which the Day Clearing Corporation thus renders is a valuable one in the saving of time and risk and energy. An additional convenience is that if securities are withdrawn from the loan envelope without securities of an equal value being substituted, they may be withdrawn "free," or without the broker having to present his check for such securities withdrawn. The debit to the broker's account thus set up is carried for a maximum of two hours by the Stock Clearing Corporation as an unsecured credit.

Price of Demand Credit

We have now seen the machinery and methods used in making, carrying and repaying demand, or call, or day, loans on the New York Stock Exchange. One important item we have not yet considered. That is the price of such credit, or the interest rate charged on demand loans. We have seen that the interest rate on brokers' loans is generally somewhat higher than that on commercial loans, due at least in part to the partiality which the Federal Reserve Banks show in rediscounting commercial paper for member banks but not doing so for collateral loans.

The interest rates generally charged at any one period, or the

¹ See Chapter VII, p. 141

² See Chapter IX, p. 173.

"ruling" rate for demand loans, is set by nothing more mysterious than the law of supply and demand. Due to the practice of daily settlements in vogue on the American markets we have seen that the demand for call accommodation may shift materially and suddenly. Due to the fact that the banker prefers to put his more or less permanent funds in commercial loans, or at least in longer-time collateral loans, and therefore uses only his surplus funds for offering in the call loan market, the supply of call funds is also subject to rapid and material changes. For such reasons it is easy to see why the call money rate in the New York market is the most widely and most rapidly fluctuating credit rate in the country, and also in the world. The very fact that call loans are made for such short periods indicates why only the most fleeting and undependable credit balances are there offered. Such credits may be "here today and gone tomorrow" in the fullest sense of the phrase.

We have seen ¹ how call loans were originally handled through the loan crowd, which also served as the market place for fixing the rate of call money interest as well as for the negotiation of such loans between lending bankers and borrowing brokers. We have also seen how the credit crises incidental to huge financing during the World War led to establishment of the money desk, for a more formal, more centralized and more responsible guidance of negotiations for call loans. The same money desk also supervises the rate for such loans and was organized for similarly improved methods of control over such rates.

Development of Method

The first step away from the informal methods of the old money crowd was establishment of a money post around which the loan crowd gathered to transact its business. At that time the "renewal rate," or the suggested rate at which old loans might be renewed for the ensuing day, was customarily fixed by the rate for the first \$1,000,000 or more loaned at the money post up to 11:30 A.M. During the War the fixing of the ruling or official

¹ See Page 228.

New York Stock Exchange call money rate was left in the hands of a joint committee of bankers and Stock Exchange officials. When the Stock Clearing Corporation was formed in 1922, however, the committee was made more official and is now known as the "money committee."

The first duty of this committee in the morning, shortly after the Exchange opens for trading, is to announce the opening, or renewal, rate for call money. This rate is arrived at after due consideration not only of the previous day's rates, the volume of trading and past history, but also of the probabilities for supply and demand during the coming day. If it is expected that banks will call loans during the day or that brokers will need to negotiate additional volume of loans, then the committee will set the renewal rate somewhat higher than would otherwise be called for, and vice versa. An effort is made to hit upon a rate which will represent an even balance between probable demand and supply for that day and a rate which will be mutually satisfactory to both borrower and lender. There is nothing obligatory about this rate. It merely serves as a suggested base for renewal of old loans and may be accepted or rejected by either lender or borrower. Usually, however, the fairness of the rate is recognized and it is accepted by both parties as a fair interest for their call loan during the ensuing day.

Giving Notice

We have previously seen that a demand loan may be terminated by either borrower or lender at its maturity, which occurs every morning. If either party is dissatisfied with the renewal rate he may suggest a higher or lower rate and if the suggested rate is not acceptable to the other party then the dissatisfied party may, of course, give notice that the loan is to be paid off and terminated.

Usually, however, call loans are terminated either because the lender needs the money for some purpose more important to him, or because the borrower finds he no longer needs the credit involved in the loan. Most call loans are renewed at the renewal

rate which is announced by the money committee on the floor of the Exchange, at the money desk, at about 10:40 A.M. each day. Confirmations of continuation of such loans are sometimes exchanged, but generally if neither party gives notice of termination of the loan, it is mutually assumed that it is renewed for another day at the official renewal rate of the Stock Exchange.

Under strict reading of the demand loan agreement such loans may be "called" or terminated at any time, but in actual practice no call loans are called after 12:15 P.M.

Out of a total of nearly \$6,000,000,000 reported by the New York Stock Exchange as the approximate volume of brokers' demand loans in force during most of 1929, it is estimated that an average of not more than about \$50,000,000, or much less than one per cent. of the total, were called in daily. This is adequate testimony of the fairness of the renewal rates set by the money committee. This committee in 1929 consisted of the following Stock Exchange officials: Samuel F. Streit, president of the Stock Clearing Corporation, E. H. H. Simmons, president of the New York Stock Exchange, Robert R. Atterbury, Robert Gibson and William A. Greer.

Supervision by the Money Committee

Not only does this committee set the renewal rate for call loans but it exercises constant and watchful supervision over the rate throughout the entire day's trading, maintaining it always as an official index of the ruling rate which, suggested by supply and demand, should be charged on any new loans being negotiated. New loans may be negotiated through the money desk at any time during active trading hours on the Exchange. Naturally, the committee tries to keep the official rate from jumping around too rapidly, but such aims do not interfere with shifting the rate in response to the fair laws of supply and demand.

Since the money committee supervises the money desk, where are constantly being received the offers and requests for demand loan credit throughout the day, this committee has its finger directly upon the pulse of old man supply and demand. If requests

for additional credit are coming in much more rapidly than offers of such credit, it is the duty of the money committee to mark up the official call rate one-half of one per cent. or more at a time, to attract additional offers of new funds. Likewise, if the offers of demand credit come in more rapidly than the requests, then it is also the duty of the committee to lower the official rate, saving its broker members from paying a higher rate than is necessary and also encouraging the banks to withdraw the credit offers which are not needed.

Meeting a Crisis

Naturally, the efforts and usefulness of the money committee are most appreciated in times of unusual or critical circumstances, such as prevailed, it may be remembered, around the close of March, 1929, when suggestions of the Federal Reserve Board that banks draw down their credits to the speculative security markets resulted in a widespread calling of demand loans by lenders on the New York Stock Exchange. Conditions became extremely uncomfortable on Tuesday, March 26, when the dearth of offered funds resulted in the money committee raising the official call loan rate to 20 per cent., compared with rates of six to eight per cent. which, though higher than the generally accepted normal rate, had been common for some time previous.

Despite some additional withdrawals, the money committee found at the beginning of the next day's trading that offers of call funds were moderately in excess of requests for such credit. The renewal rate might then have been set, it might be supposed, at a figure considerably below the previous night's close, perhaps around 10 per cent. The money committee had to look further ahead, however, than the current balance of supply and demand. It was plain that there would be increased requests for demand credit during the coming day's trading, and it also appeared that some further calling of loans by the banks might be expected that day, with no large amount of new credit to be offered in sight.

In an effort to adjust its renewal rate to the day's probable fu-

ture conditions, therefore, as well as to attract new call money offers into the market and relieve the anticipated scarcity, the committee set a renewal rate of 15 per cent. Even this higher rate failed to entice sufficient funds into the market to meet the growing demand from brokers and the call money market remained decidedly "tight" throughout the early part of the morning. With prospects that the rate would go higher and thus make more expensive the carrying of stocks on margin, owners of such margin stocks sold heavily throughout the morning and forced market prices down so rapidly as to create a situation bordering for about an hour on the fringe of panic conditions.

The Banking Influence

When this movement was at its height and it appeared that unless something drastic was done immediately the situation would get out of hand and actually precipitate such a panic, one of the large loaning banks of New York sent word to the money desk that it was ready to loan a total of \$25,000,000 on call: \$5,000,000 each at 16, 17, 18, 19 and 20 per cent., respectively. The committee might have offered the \$5,000,000 at the lower rate of 16 per cent. first but it was felt that that rate would still be too low to attract additional funds into the market, so the official rate was raised to 17 per cent. Even this high figure did not coax enough new money into the money desk and the rate was subsequently boosted to the previous day's high of 20 per cent. once more, at which level enough new offers of demand loans came into the market to more than take care of the demand. So wide was the publicity given to the day's activity of the money committee on this particular occasion, and so attractive was the rate offered, that before the closes of the day's market funds were pouring in to the money desk for loan on call from all over the country. The day ended with many millions of dollars offered but unloaned at the money desk and the crisis was past.

The above example, still fresh in the minds of many, illustrates not only the extreme variability of the call money rate but also the speed with which new funds can be mustered to supply a

critical credit demand that might have serious consequences if the rate were not so easily and quickly raised or lowered. We saw at the beginning of our chapter that the call money market has come into being, as have all of our markets, in response to a real need and a real demand for quick and efficient service to various classes and traders. The call money market serves the banker as a remunerative medium for his temporary or surplus funds, and the broker in granting him the use of credit which he may need only for a comparatively short time.

CHAPTER XII

DEALING WITH THE BROKER

Know Your Broker

Within recent years there has been a definite campaign by the banks of our nation to encourage more friendliness and direct dealing between the banker and his customers. "Know your banker" has come to mean not so much the knowledge that the bank is sound and the banker reliable, but a personal touch with one's banker — the feeling of social friendliness which encourages talking things over every so often and exchanging views on the comparative wisdom and benefits of certain actions and practices from a financial standpoint.

This campaign of the banks has been largely, perhaps, in the interest of creating good-will, but it has also resulted in a much better understanding of banking methods on the part of the individual. It has done away with the old feeling of awe which the public had toward the mysterious mahogany-caged office of its banker. Much the same sort of a campaign is needed in the brokerage business. The commission houses themselves have been so busy in recent years that they have not had time to make the initial advances, but in this case the public has made the first advances and the brokers, it must be said to their credit, have played their part with good grace.

And just as knowing one's banker has resulted in better personal understanding of how to manage one's finances for greatest profit in banking, so knowing one's broker is teaching the stock market trader much that he did not previously know about stock market trading and is resulting in more intelligent and more profitable stock market operation. While much progress has been made along lines of personal contact and friendliness between broker and customer, much remains still to be done. The large traders, the old experienced ones, are on social terms with their

brokers as never before, but the rank and file of the trading public is still just a bit diffident about free and easy intercourse, while the great army of neophyte traders are still bound by that same old feeling of reverence and awe for the mysterious and mighty broker.

Dispelling the Mystery

Such feelings come largely from lack of understanding and from lack of sufficient acquaintance with actual stock market phraseology and practice, quite as much as from a feeling of inferiority or that one's petty troubles, misunderstandings and queries are too small to merit the time and consideration of the broker. In one way the broker has been easier to get acquainted with than the banker. The broker is generally somewhat more available for he does not "go into conference" very much during the course of the day's trading. He is generally to be found about the office somewhere, especially in the smaller offices in New York City and the branch or local offices throughout the country.

It is one of the aims of this volume, therefore, to dispel any remaining clouds of mystery or divinity surrounding the personality of the broker. As the reader grows better acquainted with the actual practice of stock trading and with the machinery over which his broker presides, he may feel less timorous about approaching that individual for consultation on his problems. And the broker, on his part, if he is of a high type of character, will most certainly welcome such a personal contact with his customer and will do his share to encourage it.

The average trader has neither need nor desire to see the senior partner of a large New York commission house every time he comes in to the office. That would be just as unreasonable as asking to see the president every time one entered a large bank. Even this is possible and practical in the case of a small brokerage office, as well as a small bank, but in the case of a large commission house in a large city the customer may satisfy himself in making personal friends with any one of the many customers'

men or assistants, especially since in the large offices he will find such individuals at least as capable, and very often much more so, than the senior partner or the office manager in a small commission house office or branch.

Limits of Sociability

There are limits to such fraternization, of course, and the customer must not over-capitalize his welcome or the broker's courtesy. The "Street" gets many of its choicest stories from this type of trader, anywhere from the man who withdrew his small account from a certain brokerage house because he was not invited to the Christmas dinner of the commission house staff and a few friendly outsiders, to the attractive young lady who offered her gracious company to a customers' man in the evening as a substitute for response to a margin call after a particularly heavy day on the Exchange.

The average broker stands always ready to give advice when it is asked for by a client in good faith and within reasonable bounds. These qualifications include the full understanding on the part of the customer that the broker cannot be expected to know exactly what the market or any individual stock is going to do, that his advice is the best he can give but that no one is infallible, and that if the advice turns out to be wrong and results in loss to the customer the latter shall not hold his broker responsible for such loss. There is no individual with whom the broker dislikes so much to have any doings, particularly in the way of advice, as the unreasonable individual who always blames his losses on the broker's advice, or lack of advice, and takes any credit for gains upon himself.

Blaming the Broker

The psychology of stock market trading is such that the trader is constantly tempted to blame his losses upon someone else, to shield himself. It is so easy to say, after a stock has advanced 10 points, "Gosh, I looked at that stock just a few days ago and

was thinking of buying it, but my broker discouraged me," when the truth of the matter probably is that the customer also "looked at" a dozen other stocks just a few days ago. He forgets the ones that have declined, however, and remembers only the one that has advanced. The truth also is that the broker may have merely uttered a word of caution on the general market. But the customer forgets his logic. If the broker were really the party responsible for keeping him out of the one stock that advanced, the broker should also receive the credit for keeping him out of the other 12 stocks that have declined since the broker gave his word of caution.

The customer will not only become better friends with his broker and thus receive better attention and advice, but he will also be dealing more fairly with both the broker and himself, if he will take the time, and perhaps sacrifice enough pride, to thank his broker when the latter has saved him loss or made him profits by a timely bit of advice. The usual attitude of the customer is to belittle such advice, if he actually remembers it at all, and excuse his failure to speak of it by the argument that the broker has probably forgotten all about it anyway. In nine cases out of ten, this is not true. The stock market adviser remembers the advice he gives. If it turns out to be wrong he is pretty sure to hear of it, but he will be sorry whether the customer reminds him of it or not. If it turns out to be correct he will appreciate a word of thanks all the more because they come so infrequently, and such thanks will stamp the customer as "a man apart from other men."

Personal Advice from the Broker

It has been said that the average broker will gladly give advice when it is directly asked of him. On the other hand, the highest class of broker will not offer advice without being asked. Such a statement is open to moderate exception, but the broker who goes about his office "tipping people off" on some "sure winner," or who does the same thing over the telephone to his customers, is more liable to be trying to bolster up his own doubts about a

personal commitment which he owns, rather than to be acting on his own unbiased judgement, fundamental knowledge or fundamental favor.

It is likewise unreasonable to pester the broker for advice and get him to recommend each individual trade which the customer makes. No high class broker who is at all conscientious likes to be constantly made responsible for his clients' trading commitments. He is their agent and not primarily their adviser. If the customer wants personal advice of a regular nature on individual stocks he should go to the professional services and sources where such advice is given out regularly. Or he should put his entire account under the management of such a service or of some individual who makes a business of handling customers' accounts. The latter type of account is called a "discretionary account" and will be discussed later in this chapter.¹

Trading from a Distance

All that has been said thus far about personal relations between broker and customer is of course applicable only in those cases where the customer resides close enough to his brokerage office to make personal contact practicable. Such factors do not exist in the practice of trading by mail or telegraph with commission house offices in a distant city. Such personal contact is one of the chief arguments for trading with one's local broker, provided, of course, that he is a member of some reputable stock exchange or is otherwise known to be absolutely reliable. In the case of local brokerage houses, too, it is much easier to confirm such reliability than if trading is done through a distant office. There are plenty of high class brokerage firms who do a large and safe business by mail and telegraph with customers located throughout the entire country. But there are also a great number of unreliable and fraudulent houses who thrive on mail order and rush telegraph and telephone business, depending upon their distance from the customer to protect them from the unsavory regard in which they are held locally.

¹ See Page 285.

Personal Touch not Necessary for Success

In the case of individuals who live in the country, or in small towns without the service of a large or reputable branch office, the personal touch is not possible, but that need not deter the customer from trading confidently if he has previously convinced himself of the responsibility and reliability of his firm.¹ The personal touch is merely a valuable adjunct to successful stock market trading. It is by no means a necessity for such successful trading.

For after all, the actual transactions which a man makes in the market are the guide to his profit record. And such transactions are almost always reported by mail, even though the customer may live directly across the street from his broker. Only in comparatively few cases, where the customer is actually present in the commission house office, will the firm take oral orders, and then they are generally checked up by an early confirmation. And only where the customer is well known will the broker take orders over the telephone, and then also confirmations follow by the next mail.

The majority of orders from out-of-town customers are given and confirmed by mail, or at least in writing. Their confirmation and record are also given in writing, and here, too, almost always by mail. It is fitting and proper that we devote a little more detailed study to the usual series of such written forms which pass between customer and broker in connection with stock market orders and trades. We have previously watched Mr. Angell of Los Angeles in the branch office of Leland & Company long enough to become fairly well acquainted with the general outlines of the average commission house as well as with the various order blanks at the customer's disposal.

Written Forms

We have seen that the order desk generally carries pads to transmit buying orders, selling orders, orders to cancel and re-

¹ See Appendixes B and C, on pages 718 and 754, respectively.

quests for "quotes."¹ We are familiar with the method of using the "BUY" and "SELL" pads. If a stock has not sold for some time and no price has therefore appeared on the ticker tape the customer will not know what the quotation for that stock actually is at the time. He cannot tell whether to put in a market or a limited order until he knows approximately what the price status is on the floor of the Exchange. He therefore fills out the "QUOTE" slip. If Mr. Angell were considering buying United States Rubber common stock he would in all probability be interested in knowing what price he would have to pay for it.

Perhaps the stock has not sold for nearly an hour. That last sale was recorded at 51½, but the fact that no sales have been made for an hour indicate that the bid and asked prices are far off, and that the next trade effected may show a price considerably changed from the last trade. Mr. Angell therefore writes on the pad, which already has "QUOTE" printed at its top, merely the name of the stock he is interested in, "U. S. Rubber," signs his name and hands it in through the order window.

Getting Quotes

Previously the request for this quotation would have had to be handled by Leland & Company's floor broker and delays were numerous, to say nothing of the additional burden put upon the broker. Late in 1928, the New York Stock Exchange instituted its direct wire quotation system. The center of this new service is a central quotation room in which are stationed a number of clerks. These clerks are constantly receiving the changing quotations in all listed stocks, direct from the floor of the Exchange, from clerks stationed for the purpose at each trading post, or counter.

The clerks in the central quotation office, therefore, are supposed to have always before them the latest quotations available on all listed stocks. This central quotation room is connected by separate and direct wire with the offices of all members of the Ex-

¹ See Chapter III, p. 55.

change in the Wall Street district who desire the service, there being a nominal charge. Members not getting this direct service must still telephone their floor clerk, who gets the latest quotations from the central quotation office, but through the medium of a separate quotation clerk at the end of each bank of members' telephones.

The Central Quotation System

Most of the members to whom the service is available have subscribed to the central quotation system, and the getting of "quotes" has thus been made much more orderly, rapid and convenient, and has relieved the member house's floor broker of his previous arduous task. By February of 1929 this service had been connected up with every post on the floor and the system is now handling efficiently well over 60,000 requests for quotations per day, according to recent estimates.

Mr. Angell's request for a quotation on Rubber, under the new central quotation system, is therefore handled by the office quotation clerk of Leland & Company, who gets the latest bid and asked prices by direct wire from the central quotation office in the New York Stock Exchange, if we assume, for example, that Mr. Angell is now in a Wall Street member office. If he is still in Leland & Company's Los Angeles office, his request for a quote is telegraphed to Leland & Company's New York office, after which it is handled as previously noted, and the correct quotation wired back to Los Angeles.

In a few minutes, under normal conditions, Mr. Angell receives a slip with the quote noted upon it, perhaps as follows: "U. S. Rubber — $52\frac{1}{8}$ — $53\frac{1}{4}$." Mr. Angell now knows not only the market for Rubber but he also knows why no sale in the stock has been transacted for so long. The highest "bid price" of potential buyers is $52\frac{1}{8}$, while the lowest "offer price" of potential sellers is $53\frac{1}{4}$. They must get together before an actual deal can be made, so that Mr. Angell would be justified in assuming that the next reported sale of Rubber will be somewhere between those two prices, perhaps at $52\frac{3}{4}$, and the market for United States Rubber

common stock is advancing, since the last previous sale, recorded an hour ago, was made at only $51\frac{1}{2}$.

Generally quotations "come through" within a few minutes, especially if the broker subscribes to the new central quotation service. During the large and very active, if not chaotic, markets of 1929, even the central quotation service was so overtaxed as to fall behind, but anything less than immediate response from this section is due to abnormal conditions and is an exception to the usual rule. Allowances must be made, of course, by customers in commission offices either in uptown New York or in other cities, according to their distance from the actual seat of information.

Cancelling Orders

The "CANCEL" pad is used, as might be imagined, to cancel orders which have been previously given but are no longer wished to be executed. They are used mostly, of course, for cancellation of "limit" orders, when the customer has waited quite a while, perhaps weeks, in the hopes of getting his stock at the price named, but finally changes his mind, or decides there is no longer any use hoping for the price at which the order was originally limited. In other cases, the cancellation of an order is given merely because the customer has changed his mind or because he has made a mistake. A certain percentage of such cases are expected of the average trader but they should not be allowed to become a "habit."

One type of trader, of the species "trader nuisanciensis," is the customer who places his order first and then considers the matter after the order is "in." He then decides he did the wrong thing and wants to change his order, doing so perhaps several times in as many minutes. Such actions are, of course, unreasonable. The trader should think and make up his course of action before he puts in his order, not afterward. Likewise, if it be a market order, it is quite often impossible to "catch" the original order before execution, if the cancel is withheld more than a minute or two after the original order has been placed.

Trading by Mail

If the customer is handling his account by mail it is impossible, of course, to make such quick changes, and the customer who operates by mail should be content with a much less "active" account, or a much slower turnover, than the trader who is in constant touch with his broker by 'phone, or is actually in the commission house office. The trader by mail will, of course, have no supply of the regular brokerage office blanks but will transmit his orders merely as though he were writing a note. If Mr. Angell wanted to buy 100 shares of United States Rubber he would write some such note as follows:

R.F.D. #3,
Los Angeles, Calif.
August 5, 1929.

Leland & Company,
42 Exchange Building,
Los Angeles, Calif.

Gentlemen:

Please buy for my account 100 shares of United States Rubber common stock at $50\frac{7}{8}$, good till cancelled.

Yours truly,
(Signed) George D. Angell

Any other orders which Mr. Angell might care to make he would write out in just such note or letter form as that above, mailing them to the address of his broker. If he happened to be travelling and was in San Francisco he might write his order from there, but in such case he would also give his regular R.F.D. address, corresponding with his permanent address in the files of Leland & Company, so that the latter might know the order was genuine.

Trading from Another Broker's Office

In such a case, however, Mr. Angell might wish quicker action than he could get by writing, or even 'phoning Leland & Company

at Los Angeles. He might be in the brokerage office of Austin Brothers, at San Francisco, and seeing United States Rubber going down rapidly, with prospects of falling even farther within the next half hour, might decide to sell immediately. In such case he could make the transaction through Austin Brothers, but

FORM 16

LELAND & CO.
MEMBERS OF NEW YORK STOCK EXCHANGE
EXCHANGE BLDG.

TELEPHONE NORTH 0000

LOS ANGELES, CAL. *August 6* 19*29*

*Mr. George D. Angell,
R. F. D. #3,
Los Angeles, Cal.*

IN ACCORDANCE WITH YOUR INSTRUCTIONS WE HAVE THIS
DAY *Bought* FOR YOUR ACCOUNT AND RISK

QUANTITY	DESCRIPTION	PRICE	BOUGHT OF
<i>100</i>	<i>U. S. Rubber</i>	<i>50 7/8</i>	BROKERS' NAMES FURNISHED ON REQUEST

It is agreed between customer and broker:
 1 That all transactions are subject to the rules and customs of the New York Stock Exchange and its Clearing House.
 2 That all securities from time to time carried in the customer's marginal account, or deposited to protect the same, may be loaned by the broker, or may be pledged by him either separately or together with other securities either for the sum due thereon or for a greater sum, all without further notice to the customer.

LELAND & CO.

PER: *E. D. M.*

PLATE 48. CUSTOMER'S PURCHASE CONFIRMATION

Reporting purchase for Mr. Angell of 100 shares of United States Rubber common stock at a price of 50 7/8.

for his own account with Leland & Company, through the medium of what is known as a "give-up" order. He would write, "Sell 100 U. S. Rubber at market — give up to Leland & Company, Los Angeles, Calif. (Signed) George D. Angell, R.F.D.

#3, Los Angeles, Calif." He would give this order to the clerk at Austin Brothers in San Francisco.

The "Give-Up" Order

They would execute the order immediately, meanwhile confirming Mr. Angell's account with Leland & Company, probably by telephone, with charges reversed and paid by Mr. Angell. Mr. Angell's transaction would thus be completed with a minimum of delay but the order would actually be transferred to Leland & Company by Austin Brothers, with the two firms splitting the commission.

Report Forms

We have now become familiar with the various written forms used in transmitting the customer's order to his broker. Let us now see the various forms of report by which the broker informs his customer that the latter's wishes have been carried out. There are a multitude of such forms. Perhaps the most important are the actual "confirmation" reports, that is, the actual reports that a transaction has been completed, which we have previously noted.¹ Suppose Mr. Angell has mailed his order to Leland & Company for purchase of United States Rubber. When the transaction is completed his confirmation will read, "We have this day bought for your account and risk 100 shares of United States Rubber common at 50 $\frac{7}{8}$," and this confirmation will go out to him by mail the evening of the day on which the transaction was made.

If United States Rubber does not sell as low as 50 $\frac{7}{8}$ on that day, after Mr. Angell's order has been received, the transaction will not be made, since Mr. Angell entered a limited order prescribing that he will not pay more than 50 $\frac{7}{8}$ for his stock. In that case the confirmation of his order goes out to him by the evening mail, "It has not been possible to execute your order to buy 100 U. S. Rubber at 50 $\frac{7}{8}$ this day. We understand this order as in

¹ See Chapter IV, p. 66.

effect until executed or countermanded, and have so entered it upon our books."

If Mr. Angell's order had been made out "good this week" or any of the other methods of time limit, the confirmation would

FORM 18 2M AD

LELAND & CO.
EXCHANGE BLDG.

MEMBERS OF
NEW YORK STOCK EXCHANGE

TELEPHONE
NORTH 0000

LOS ANGELES, CAL. August 6 1929

M. A. George H. Angell,
R. F. L. # 3,
Los Angeles, Cal.

DEAR SIR:

IT HAS NOT BEEN POSSIBLE TO EXECUTE YOUR ORDER TODAY

TO Buy
100 U. S. Rubber @ 50 7/8

WE UNDERSTAND THE ORDER AS IN FORCE UNTIL EXECUTED OR
COUNTERMANDED AND HAVE SO ENTERED IT ON OUR BOOKS.
SHOULD YOU DESIRE TO CANCEL SAME, PLEASE ADVISE US IMMEDIATELY

It is agreed between customer and broker:
1. That all transactions are subject to the rules and customs of the New York Stock Exchange and its Clearing House.
2. That all securities from time to time carried in the customer's marginal account, or deposited to protect the same, may be loaned by the broker, or may be pledged by him either separately or together with other securities, either for the sum due thereon or for a greater sum, all without further notice to the customer.

LELAND & CO.
PER. Eggs

PLATE 49. CUSTOMER'S LIMITED G.T.C. ORDER CONFIRMATION

Such forms are usually sent out by mail at the close of the day's trading.
This order will stand "Good till cancelled."

have been thus altered. If his order had been "good today only," the confirmation would have read, "We understand this order as in effect this day only and have accordingly cancelled the order

on our books." Selling order confirmations are handled in exactly the same way.

If Mr. Angell found his account was too low, or if he received a margin call, or for any reason decided to put some more money into his account with Leland & Company, he would write them a note saying, "Enclosed please find check for five thousand dollars (\$5,000) which please credit to my account." The next day he would receive the confirmation of Leland & Company, "We have this day placed to the credit of your account \$5,000 received by check."

Dividend Practice

If Mr. Angell held 100 shares of Steel common at the date it went ex-dividend the amount of the dividend would be placed to his credit on the date such dividend was "payable," and he would receive such confirmation as follows: "We have this day credited your account with dividends on the following stock standing in your name, 100 shares of U. S. Steel at \$1.75 — \$175.00." If, on the other hand, Mr. Angell happened to be short of 100 shares of International Nickel when it went ex-dividend, we have previously seen that the true owner of his borrowed stock would claim such dividend.¹ Leland & Company would pay it and debit Mr. Angell thus, "We have this day debited your account with dividends on the following stock standing in your name — short 100 shares International Nickel at 20 cents per share — \$20.00." Such debit, however, would not be made until the dividend on International Nickel was actually payable. By that time Mr. Angell might have covered his commitment and be out of the transaction entirely, but he would still have to pay this dividend, so long as he was short of the stock on the date when it went ex-dividend. We shall see later, however, that theoretically he suffers no loss since the price of the stock automatically (and theoretically) drops the amount of the dividend, when it goes ex-dividend.²

¹ See Chapter IX, p. 176.

² See Chapter XV, p. 353.

FORM 19

LELAND & CO
EXCHANGE BLDG.

MEMBER OF
NEW YORK STOCK EXCHANGE

TELEPHONE NORTH 0000

LOS ANGELES, CAL August 6 1929

M. r. George H. Russell,
N. F. L. # 3,
Los Angeles, Cal.

DEAR SIR:

IT HAS NOT BEEN POSSIBLE TO EXECUTE YOUR ORDER TO-DAY

TO Buy
100 U. S. Rubber @ 50 7/8
____ @ ____
____ @ ____

WE UNDERSTAND THE ORDER IN FORCE TO-DAY ONLY, AND HAVE
CANCELLED IT ON OUR BOOKS

SHOULD YOU DESIRE US TO RENEW THE SAME PLEASE ADVISE
US IMMEDIATELY.

RESPECTFULLY,

LELAND & CO.
PER Egm

PLATE 50. CUSTOMER'S LIMITED DAY ORDER CONFIRMATION

In distinction from Plate 49, this order was given with the time limit of "today only," is called a "day order," and is automatically cancelled if not executed during the day's trading.

Limited Orders Reduced on Ex-Dividend Dates

This fact is also responsible for still another type of report from broker to customer. In the case of a limited order at a certain price, such price is directly affected by a stock going ex-dividend, since theoretically the price of that stock will be reduced the amount of the dividend on the first sale of the morning when it has gone ex-dividend. Theoretically, therefore, it is assumed that since the dividend "has come off" the stock, the prospective trader in it will expect to have his limited order reduced by the amount of that dividend. Brokerage house custom calls for such reduction in the case of all limited orders.

For instance, if Mr. Angell had entered a limited order to buy 100 shares of United States Steel common at 165, good till cancelled, and the order had not been executed, the price of Steel staying constantly above the limit which Mr. Angell was willing to pay, then the order would, as ordered, remain in force indefinitely until Mr. Angell saw fit to cancel it. Suppose U. S. Steel common stock went ex-dividend, however, during the life of this order. Theoretically, the market price of the stock would drop by exactly the amount of that dividend per share on the morning of its ex-dividend date. Leland & Company would therefore proceed to reduce Mr. Angell's limited buying order by the amount of the dividend of \$1.75 per share. Leland & Company would report as follows to Mr. Angell: "United States Steel common stock was quoted today ex-dividend $1\frac{3}{4}$. We have accordingly reduced your order as follows, to buy 100 shares of U. S. Steel at $163\frac{3}{4}$, good till cancelled." Stop orders are reduced in just the same way by ex-dividend amounts. Exactly the same considerations and practices apply equally to the selling side as to the buying side.

Simple Confirmations

We have seen how every purchase of stock, every sale, every credit and every debit which Leland & Company make in Mr.

FORM 51

LELAND & CO.
EXCHANGE BLDG.

TELEPHONE NORTH 0000

LOS ANGELES, CAL. November 4 1929

M. George H. Angell,
R. F. H. #3,
Los Angeles, Cal.

DEAR SIR

U. S. Steel Common SOLD EX-DIVIDEND

TODAY \$ 1.75

WE HAVE ACCORDINGLY REDUCED YOUR ORDER TO

BUY 100 Steel FROM 16.5 TO 16 3/4 qts.

IF THIS IS NOT CORRECT, PLEASE ADVISE.

RESPECTFULLY

LELAND & CO.
PER EgH

PLATE 51. EX-DIVIDEND NOTICE ON A LIMIT ORDER

Sent out usually by mail after the close of business on the ex-dividend date. Theoretically, Steel dropped $1\frac{3}{4}$ points on that day, accounting for the automatic reduction in the limit price on the G.T.C. order.

Angell's account is reported to him by mail through this system of direct "confirmation." A simple confirmation, however, does not generally carry the cash extension value of the transaction. If Mr. Angell sold his 100 shares of United States Rubber common he would probably receive only a simple confirmation as follows: "We have this day sold for your account and risk, according to New York Stock Exchange rules, 100 shares of U. S. Rubber at $54\frac{3}{4}$." From this simple confirmation Mr. Angell would not know exactly how much his account had been credited, since this type of report does not contain any cash extension or deduction from the gross proceeds for commissions and selling taxes.

It is a fairly simple matter for Mr. Angell, who is now experienced at trading, to figure about what his net credit would be. But if he likes to keep exact account of all his debits and credits as they are made on the broker's books he will request Leland & Company to send him a "bill" instead of a confirmation after each trade, and they will do so regularly. Since this is the most satisfactory method of trading, if the customer watches the pennies in his brokerage account, bills should generally be asked for.¹ Many brokerage houses furnish them regularly without the asking, but all of them will furnish them regularly upon request.

The Bill as a Confirmation

The bill is a much more complete statement of each transaction. In the case of Mr. Angell's sale of U. S. Rubber his bill would show not merely the sale of 100 shares of U. S. Rubber at $54\frac{3}{4}$, but would also carry the cash extension of that gross credit, or \$5,475. From this gross amount would be deducted the commission of, let us say, \$25² which Leland & Company charge for executing the sale, and also the \$2 state tax and \$2 federal tax for sale of 100 shares of the stock. The total deduction from the gross credit of \$5,475, therefore, would be shown at \$29, and the net credit, or true credit, which Leland & Company place to Mr. Angell's account as a result of that transaction, would also be

¹ See Chapter III, p. 44.

² See Page 283.

shown at \$5,446. Thus Mr. Leland can keep better track of his actual credits and debits if he receives bills, and not simple confirmations, as he makes his trades.

FORM 23		LELAND & CO.					
		MEMBERS OF NEW YORK STOCK EXCHANGE					
TELEPHONE NORTH 0000		EXCHANGE BLDG.					
		LOS ANGELES, CAL., June 15th, 1929 19__					
Mr. George D. Angell, R.F.D. #3, Los Angeles, Cal.							
WE HAVE THIS DAY SOLD.		FOR YOUR ACCOUNT AND RISK ACCORDING TO EXCHANGE RULE					
BROKERS' NAMES FURNISHED ON REQUEST							
QUANTITY	DESCRIPTION	PRICE	AMOUNT	COM'N	INT.	TAX	TOTAL
100	U.S. Rubber	54 $\frac{3}{4}$	\$5,475.00	25.00	St. Fed.	2.00 2.00	\$5,446.00
It is agreed between customer and broker: 1. That all transactions are subject to the rules and customs of the New York Stock Exchange and its Clearing House. 2. That all securities from time to time carried in the customer's marginal account, or deposited to protect the same, may be loaned by the broker, or may be pledged by him either separately or together with other securities either for the sum due thereon or for a greater sum, all without further notice to the customer.							
						LELAND & CO. PER <i>SPM</i>	

PLATE 52. CUSTOMER'S BILL OF SALE

A much more complete statement than the confirmation shown in Plate 48 on page 255. The bill shows the charges for brokerage commission and taxes, and the actual net debit or credit of the customer which will appear on his monthly statement.

Make-up of a Brokerage Statement

We are now ready to take up the regular statements of account which are furnished to brokerage house customers. They are nothing but a tabulation of the various debits and credits made since the last statement, and consist of all the items for which the customer has presumably received individual confirmations, bills or notices during the period since his last previous statement. It is the practice of brokerage houses to mail out

these statements shortly after the first of each month, and they are called monthly statements. In the case of very active accounts such statements are sent out more often and, in any case, the customer is entitled to receive one more often than once a month by making formal request to his broker. If no special request is made then the customer should ordinarily receive his regular statement of account once a month.

To understand and check such monthly statements requires at least a slight knowledge of the principles of bookkeeping method, since the statement is little more than a page out of the ledger of the brokerage house, showing its debit and credit entries for the particular account concerned. Just as bookkeeping practices vary with differing system and technique, so do the various methods and systems of arranging the monthly brokerage statement vary with different commission houses. Generally they are arranged in halves, the one side for credit items and the other side for debit items. Interest charges are either entered on an additional section of the statement or are entered in separate columns but included directly in the debit and credit sides of the statement. The statements are either arranged to show the actual balance, either debit and credit, and the amount, at the close of each day, or merely the daily items are entered with their dates, and the balance left for the final settlement at the bottom of the statement.

In any case, the monthly brokerage statement is nothing more nor less than a record of all credits or debits made during the month in the particular account in question, with a summary of how the various charges have arisen. The balance of such total debits and credits for the month exerts its net effect upon the balance at the close of the previous month, to give the balance at the close of the new month.

A Specific Example

Probably the best way of understanding the make-up of such a monthly statement is to study a simple one, in a fairly inactive account, and follow the various entries, seeing how they originate

and how they affect the customer's balance, which latter figure, of course, is the most important one on the statement and the real reason for making the statement. First, we must have a starting point for the beginning of our month's trading record, which is the balance carried forward from the statement of the previous month. Let us assume that we are examining the July 1st, 1929, statement of our old friend Mr. Angell of Los Angeles, in account with our equally oldtime friend, Leland & Company of Los Angeles.

Let us also assume that at the close of May Mr. Angell was carrying 100 shares of United States Steel, \$1,000 of Atchison, Topeka & Santa Fe Railroad 4 per cent. bonds of 1962, and 100 shares of American Can common stock. At the same time he was also short 100 shares of International Nickel common stock. We shall see later why the latter short commitment results in the credit entry at the beginning of the statement.

All we need to know now is that at the close of May, when Mr. Angell received his last previous statement, he had a debit balance of \$12,642.76. This means that the actual debits to Mr. Angell's account, since he opened it, exceeded the actual credits by that figure, and that he therefore owed that amount to Leland & Company. For security on such loan, Leland & Company have, of course, the certificates for the stock of which Mr. Angell is long.

Proving the Balance

If we wish to "prove" the debit balance, we may do so roughly by taking the actual value of Mr. Angell's holdings at the close of May. Giving Steel a price of 140, he has a credit of \$14,000 for the 100 shares which he holds. Figuring his \$1,000 bond at par gives another \$1,000 credit, and 100 shares of Can at a price around 140 adds a further credit of \$14,000, or a total of \$29,000. Against this Mr. Angell is responsible for the repurchase, or covering, of 100 shares of International Nickel which he is now short, which, at a price of around 61, gives a debit of \$6,100. But this debit has already been subtracted from the total credit in the

previous month's statement as shown by the "contra" entry on Nickel, noted above, and further explained on a later page.¹ The actual transactions, or money entries on his account, have shown Mr. Angell with a money debit balance of \$12,600. But to cover this debit balance Mr. Angell's present position with regard to long stocks, which may be converted into money at any time, shows a credit of \$29,000. The actual state of his account, therefore, considering stock values as well as money values, shows that Mr. Angell has a net credit of about \$16,000. If we want to figure Mr. Angell's margin, therefore, we find he has about \$29,000 of stock values to his credit and only about \$12,600 debit balance with his broker, or borrowed upon them. Going back to our old formula, therefore,² the margin is the difference between the present value of his stock (\$29,000) and the amount of his loan, or debit balance (\$12,600), amounting to about \$16,000 over the total value of his stock (\$29,000), giving a margin of \$16,000 over \$29,000, about $\frac{16}{29}$, or around a 50 per cent. margin, which is perfectly satisfactory to Leland & Company.

Individual Transactions

Starting, therefore, with Mr. Angell's debit balance of some \$12,600 at the close of May, we are ready to begin our study of the various transactions, resulting in credits and debits during the month of June, which will change that balance as it appears at the close of the statement, as of June 30th. Let us assume that Mr. Angell's first transaction in the new month of June was the purchase of 100 shares of United States Rubber at 52½. The bill he received for that transaction showed a cash extension of \$5,262.50, to which was added the broker's commission of \$25 for purchase, making Mr. Angell's total debit on the transaction \$5,287.50. This purchase, taking place on June 3rd and therefore entered on June 4th, is debited as just this amount on the left, or debit, side of the monthly statement, as will be seen in Plate 53.

Such purchase would reduce Mr. Angell's margin to less than 40 per cent. which is not any too large, especially on a basis of

¹ See Page 279.

² See Chapter VIII, p. 152.

the increased margins required in recent years. The broker would hardly call on Mr. Angell for more margin as a result of this transaction, but let us assume that Mr. Angell decides to take no chances. He sends his broker a check for \$5,000 and receives the confirmation that Leland & Company have credited his account with this check. Being a credit, the item appears on the right, or credit, side of the monthly statement.

Next, Mr. Angell decided to sell 100 shares of Radio Corporation common stock short, expecting the price to decline in the future. He got 89 $\frac{5}{8}$ for the sale, and is therefore credited with the cash extension of \$8,962.50 less \$25 for commission and \$4 sales tax, leaving him a net credit of \$8,933.50. Next he decided to cover his short commitment in International Nickel and so purchased, on June 12th, 100 shares of Nickel at 59 $\frac{3}{4}$. The debit on this transaction is \$6,000, as was itemized on the bill which Mr. Angell received the day after execution of the trade. The bill showed a cash extension of \$5,975, which was raised to the actual debit by addition of the brokerage fee of \$25. It so happens, however, that Mr. Angell is not entirely through with the contingent expense of this short sale, even though he has covered it and is thus, to all practical purposes, out of the stock, having completed both sides of the transaction. For while Mr. Angell was short of the stock it went ex-dividend.

Paying Dividends on Short Stock

We have previously seen ¹ that in such a case the customer who is short of the stock has to pay the amount of the dividend. He does not have to do so, however, until the date when such dividend is actually payable by the corporation making the dividend disbursement. International Nickel probably went ex-dividend around the end of May and thus Mr. Angell, short of the stock at that time, must pay the amount of the dividend to whomever he has borrowed the stock from, on the date the dividend is payable. This date, Leland & Company find, is June 15th and they accordingly debit Mr. Angell's account with the amount of that

¹ See Chapter IX, p. 176.

dividend, which is 20 cents per share, or a total of \$20 on the whole block of 100 shares. Leland & Company have a dividend clerk who pays strict attention to such dividend matters. He has probably already received, by June 15th, a claim for the dividend on International Nickel from the lender of the stock, but in any case he knows he will be obliged to pay that dividend some time, so he debits Mr. Angell with it on the payable date of June 15th.

On June 13th Mr. Angell decided to take a large profit and sell the 100 shares of United States Steel which he was long when the month opened. He sold at 166 $\frac{1}{4}$. The cash extension for the transaction was \$16,625, but Mr. Angell does not get all of this gross amount. There are the broker's commission of \$25 for selling, and the state and federal taxes of \$4 to be subtracted, leaving Mr. Angell a net credit of \$16,596. These deductions were itemized on Mr. Angell's bill, received the day following the transaction, but his monthly statement shows merely the date, the transaction and the actual net credit to his account. The settlement date used is one day after the actual trade.

Now it so happens that United States Steel common stock went ex-dividend around the close of May, just as did International Nickel. In the latter case Mr. Angell was borrowing the stock, or was short of it, and so had to pay the amount of the dividend, while in the case of Steel he is long of the stock, is the true owner of it, and is therefore entitled to receive the amount of the dividend. He does not actually receive such dividend until the date on which it is paid by the disbursing corporation, of course, just as though the stock were in his own personal possession instead of pledged with some unknown banker as collateral for his loan.

So long as the Steel stock was Mr. Angell's property on the ex-dividend date, therefore, the dividend belongs to him, when it is payable, no matter what he has done with the stock by that latter date. As a matter of fact, we have seen that Mr. Angell sold his 100 shares of Steel the day before the dividend was payable. But he is still entitled to receive that dividend, and accordingly, on the date it is payable, he is credited with the \$1.75 per share dividend on 100 shares, or a total credit of \$175.

Commissions "Both Ways"

Mr. Angell's next transaction was on June 15th when he sold the 100 shares of United States Rubber at $54\frac{3}{4}$, which he had previously purchased on June 3rd at $52\frac{5}{8}$. Once more his net credit is smaller than the cash extension by the brokerage commission and the selling taxes and he receives a credit of only \$5,446. This transaction was a profitable one, and after paying commissions for both buying and selling, or "both ways," Mr. Angell has made a profit of over \$50 as measured by the difference between the original debit item and the later credit item on his monthly statement. We shall later see¹ that there is an added expense of interest to be subtracted from this profit, but it is included in the total interest charges figured on the account for the entire month and charged at the bottom of the monthly statement.

On June 20th Mr. Angell covered his previous short sale of Radio and went short 100 shares of Chrysler Motor Corporation common stock, at $71\frac{1}{8}$. His commitment on the short side of Radio was unfortunate since the stock advanced against him instead of going down as he had anticipated. Mr. Angell had to pay more to cover, or buy back, his Radio than he sold it at, and the transaction therefore resulted in a loss. He sold at $89\frac{5}{8}$ and was forced to pay $91\frac{1}{4}$ when he covered, or bought it back. In the latter case, of course, his debit on the purchase is the cash extension plus brokerage commission. In selling his 100 shares of Chrysler short the net credit is the cash extension minus the brokerage commission and sales tax.

A Price, "Flat"

On June 26th, Mr. Angell decided to sell out the 100 shares of American Can which he was long at the beginning of the month. He got $139\frac{1}{4}$ for it, giving him a net credit of the cash extension, \$13,925, less brokerage fee of \$25 and the sales tax of \$4. His last transaction of the month was the purchase of 100 shares of

¹ See Page 274.

New York Central Railroad common stock at 192, even, or "flat," meaning that the number is a whole number, with no fractions following. His debit is the cash extension of \$19,200 plus the brokerage fee, giving a debit on his statement of \$19,225.

This closes Mr. Angell's transactions for the month of June and we may now begin to figure his balances. It is quite simple to see that the difference between the actual credits and actual debits, as have been noted on the statement for the month, is the thing which will act to change the balance which Mr. Angell had at the beginning of the month. If credits exceed debits for the month in question, then a debit balance at the beginning of the month would be reduced by that amount, and a credit balance at the start would be increased by the amount of this net credit for the month. If, on the other hand, debits exceeded credits during the month, then a debit balance at the beginning of the month would be increased, or a credit balance at the start would be decreased, by the amount of the difference between debits and credits, or by the debit balance for the month in question.

Credits Exceed Debits

In the case of Mr. Angell's transactions for the month of June it will be seen by running over the various cash items, with the exception of the debit balance with which he began the month, that his credits during the month of June have exceeded his debits. Such difference, since Mr. Angell had a debit balance to start with, will be subtracted from that original debit balance. If the net credit balance for the month is still less than the debit balance at the beginning of the month, then Mr. Angell will still have a debit balance, even though reduced by that amount of credit balance for the month. If, on the other hand, the credit balance for the month should actually be larger than the debit balance with which Mr. Angell began the month, then such credit will more than balance the original debit, and Mr. Angell will close the month with a credit balance instead of the debit balance he started with.

This latter situation is exactly the one which applies in the case

of Mr. Angell's statement for June. Leaving out, for the moment, the original debit balance, the original short credit on Nickel and the final short debit on Chrysler, it will be seen that Mr. Angell's total credits for the month amount to about \$57,000, while his total debits, excluding the short and balance items mentioned, amount to only about \$40,000. The difference shows a net credit during the month of about \$17,000.

This is more than the \$12,642 debit balance with which Mr. Angell started the month, so it is plain that his June credit balance will not only wipe out the original debit balance but will leave around \$4,000 besides, which will give Mr. Angell an actual credit balance at the end of the month. This is actually the item of \$3,694.27 which shows as his credit balance at the close of the month, though, through the usual process of bookkeeping methods, in order to have both sides of the statement, or ledger, in balance, the credit balance with which Mr. Angell will begin the new month of July actually appears on the debit side of the old statement.

The Interest Account

For a few moments, in order to clarify our process of arriving at Mr. Angell's balance at the close of the month, we have merely taken for granted the justice of the various interest account debits and credits at the bottom of both sides of the statement. We may now take these up in detail and see how they are arrived at. For the same purpose of clarification, we have ignored all reference to interest in our previous examination of Mr. Angell's transactions during the month of June. Since the interest charges incident to each of his transactions make up the debit and credit interest balances shown at the bottom of the statement, however, we must now go over each of those individual transactions and see how the various interest entries are computed.

We have previously seen that there are various ways of computing such interest charges in making out brokerage statements. The one in question includes such entries in separate columns on both the debit and credit sides of the ledger. Where the actual

debit or credit balance in an account is shown at the close of each transaction, interest is usually figured in a separate sheet attached to the statement itself. In such case interest is constantly entered in separate items for each day's net balance and not for the total debits and credits as they arise. This method simplifies the interest calculation somewhat but is impossible in the cases where the statement does not show the daily balance but merely the final balance at the end of the month.

Our sample statement is of the latter type and here, therefore, each debit as it arises on the ledger is charged interest from the date of entry until the end of the month, while conversely, each credit, as it arises, is credited with interest from the day it enters the ledger until the end of the month. It is quite apparent that the debit entered early in the month may be cancelled by a credit entry later in the month, and the early interest charge on the debit balance is ratably reduced by the later interest credit item.

The rate of interest which the broker will allow on credits is less than the rate he will collect on debits, but for purposes of simplification the same charge of six per cent. is always made on both sides of the ledger during the month and the totals are adjusted to the true interest rate at the close of the month in balancing the account.

The Individual Items

To begin back at the beginning of Mr. Angell's June statement once more, he has, at the opening of the month, a debit balance of \$12,642, and so he is charged interest, at the bookkeeping rate of six per cent., on this amount for the whole 30 days of June. Under the interest columns, therefore, we find the number of days to the end of the month and the amount of interest represented, in this case a debit of \$63.21. It may now be argued that it is wrong to charge Mr. Angell interest on this debit balance for the whole month of June, since his balance will be changing constantly. We have seen that at the end of the month he has an actual credit balance, and possibly by the fifth of the month

he might have such a credit balance. So why charge him for this constant debit balance throughout the whole month just because he starts out with that debit? The answer is because it makes the bookkeeping easier in figuring interest in this type of statement, where the actual balance is not shown each day, or at the close of each transaction. And also because the method followed gives just as perfect, correct and equitable an interest balance at the close of the month.

For we know that any entry to reduce the original debit balance will be made on the credit side. That entry will also set up a credit of interest for the number of days between the date of entry and the close of the month. Such interest credit, therefore, will cancel off the proper proportion of the total interest debit charged for the whole month on the original debit balance at the beginning of the month. We shall see how this works out as we take up each transaction individually.

For instance, as soon as Mr. Angell's check for \$5,000 is received and the resultant credit appears, he is likewise credited with interest on that cash credit from the date of entry until the close of the month, thus cancelling off a part of the interest debit for the month on the original cash debit balance. The interest credit of \$21.67 does not equal the interest debit of \$63.21 because the \$5,000 would not entirely cancel the original debit of \$12,600 and also because it entered the ledger account of Mr. Angell four days later than the debit entry which runs from the very beginning of the month.

When Mr. Angell paid for his 100 shares of United States Rubber on June 4th, interest immediately began on that debit entry and the interest debit on \$5,287.50 for the remaining 26 days of the month is accordingly entered at \$22.91. To clarify the logic of this bookkeeping method of interest computation we might skip a few of Mr. Angell's intermediate transactions, and drop directly over to the credit side of his account when he sold out his United States Rubber on June 17th. The interest credit of \$11.80, for 13 days remaining in the month on the credit entry of \$5,446, it is apparent, will cancel the surplus debit of \$22.91 extending beyond June 17th, when the debit of \$5,287.50 was also cancelled.

Interest on Short Sales

Going back, once more, to our systematic examination of the actual debits and credits for the month, we find that on June 6th Mr. Angell had a credit of \$8,933.50 as a result of selling 100 shares of Radio common short. In the case of a short sale, however, no interest is generally credited because the broker must take the money received from such sale to deposit as security for the stock he borrows to make delivery on the short sale. The broker, of course, gets interest on that loan. He sometimes passes it on to a good customer, sometimes splits it with him, but more often does not credit any of it to the customer. There is no interest entry for this cash entry, therefore, the initial "S" merely indicating that the entry is the result of part of a short sale transaction.

Skipping, once more, to the debit entry when Mr. Angell covers this short sale, on June 21st, we find that no interest debit is made here either. We have seen previously that when Mr. Angell covers his short sale by buying Radio the stock will be used to repay the loan of stock borrowed for him by the broker. The broker then immediately receives back the cash loan which he has made to the lender of the stock. Thus the cash loan repayment is used to pay for the stock which Mr. Angell buys in his covering transaction, and there is no true debit, or borrowing of credit from the broker, so no interest is charged on either entry of the two parts of a short sale.

For the same reason, no interest entry appears in connection with Mr. Angell's purchase of International Nickel, on June 13th, since he is by this purchase merely covering his previous short sale, having been short of Nickel when the month opened. However, when Mr. Angell sells his Steel on June 14th he is reducing his debit balance, and thus he receives a credit of \$44.26, being the interest on the credit entry of \$16,596 for the 16 days remaining in the month, at the bookkeeping interest rate of six per cent. This interest entry as a credit will, of course, help further toward cancelling off the original debit of \$63.21 for the

whole month of Mr. Angell's original debit balance, just as the credit entry of \$16,596 helps to reduce this original cash debit balance.

No Interest on Small Items

Interest is generally neither charged nor credited on small items like dividends, so neither of the dividend entries carries interest entries. We have previously noted the interest computation for Rubber on June 17th as well as the lack of such entry for Radio on the 21st. Mr. Angell's sale of Chrysler on June 21st is part of a short transaction and there is therefore no interest entry. There is, however, a small interest credit of \$6.95 on the sale of Mr. Angell's American Can, as of June 27th. The smallness of the interest credit is due, of course, to the few days left between entry and the close of the month. The same applies to the interest debit of \$6.41 on purchase of New York Central as of June 28th, interest being charged for only two days, on the cash debit entry of \$19,225.

Since the broker does not receive payment on stocks sold, or make payment on stock bought, until the day after the transaction has been made, so he does not begin to charge or credit interest until the day after the transaction. The ledger entries on the monthly statement, therefore, are usually dated the day after the date of actual completion of the transaction represented. This holds true, of course, only in the case of actual trades, and not for dividends received, paid out, etc.

Balancing the Interest Entries

We have now seen how the various debit and credit interest entries arise and can balance the interest account just as we did the cash entry account. It is seen that the debit entries in the interest column are larger than the credit entries, so that in order to make the debit and credit sides balance, according to regular bookkeeping practice, a credit item is called for of the difference, or \$7.85. This item is entered to "balance the interest account,"

but it also appears on the debit side as the actual interest charged for the month at six per cent.¹

We have seen that in making the interest computations for the individual transactions, the bookkeeper has always used the standard interest rate of six per cent. for the sake of convenience, and also because the bookkeeper does not know when he makes such individual entries during the month just what the actual rate of interest charged and credited will be at the end of the month. We have also seen that the broker will not credit interest at so high a rate as he charges interest.

The interest charged on debit balances is usually made up at the end of the month and is arrived at by averaging the various daily rates which the firm has had to pay for its accommodation during the month in question, whether through the medium of time loans or call loans. Generally, too, the broker charges a slightly higher rate than the average for his compensation in arranging the necessary credit accommodations. In calculating the rate of interest to be allowed on credit balances the broker is guided by various factors, including chiefly the average call money rates for the preceding month.

But here, too, he will usually reduce this average moderately to compensate him further for services in arranging short sales, carrying the account, etc. The rate allowed is usually at least one per cent. below the average call money renewal rate for the past month and anywhere from two to five per cent. or more below the rate of interest charged by the broker for that month on debit balances.

Interest Rates Vary

The rate which the broker shall charge or credit on interest is variable and he has and takes considerable leeway in arriving at such rates. In fact, the rates are fixed at different figures for different accounts, the broker favoring his "good accounts," or those which are active, carry large balances and generally bring him the greatest profit, while he is more likely to dis-

¹ See Chapter VIII, p. 158.

criminate against the small account, or one which does not bring him any great profit, compared with the work involved in handling the account. In the case of small or branch houses the senior partner or manager generally goes over each account and sets the interest rate for both credit and debit on each account individually, though in the larger houses this personal scrutiny is impossible and the rate is fixed by automatic rule, or by one of the lesser dignitaries of the office.

Let us assume that in this case Leland & Company find their collateral loans have averaged 6.12 per cent. for the month of June. They will therefore charge Mr. Angell eight per cent. on any debit balance for the month or allow him only about five per cent. on any credit balance. This is fair, but not the best treatment, but Mr. Angell's account has not been particularly active for this month and he is not one of the "big customers."

We have seen how the various credit and debit interest charges cancel themselves out in equitable fashion throughout the month, since both sides are figured at the same rate of six per cent. We have also seen that Mr. Angell's interest debits exceed his interest credits. If interest on his debit balance were being charged at the rate of only six per cent., therefore, the balancing item of \$7.85 would be the exact amount of his debit interest charge for the month.

Leland & Company are going to charge Mr. Angell a total of eight per cent. interest on his debit balance for this month, however, or one-third more than the basic six per cent. rate. The additional two per cent. interest debit charge is therefore one-third of \$7.85, or an additional charge of \$2.62. Since they are actual charges both of these items appear on the debit side of the statement, at the end of the month.

Short Position Balances

One important, and sometimes confusing, point of commission house practice in issuing statements is treatment of short balance items at the beginning and end of each month. To simplify our explanation, let us consider the short sale of Chrysler, en-

tered on June 20th. We have previously seen that Mr. Angell's theoretical balance, or equity, at the beginning of the month was offset in part by his uncovered and outstanding short commitment in Nickel, which resulted in somewhat of a "contingent debit" of indefinite amount, since there is no way of telling at what price Mr. Angell will cover in the future his past short sales.

The same situation appears at the end of the month in the case of his open short position in Chrysler. It would be unfair and incorrect to show the balance in Mr. Angell's account at the end of June without making some allowance for this contingent debit, which will not be definitely settled until he buys 100 Chrysler to cover his short sale.

Brokerage house practice differs somewhat in dealing with this item, but most houses set a definite price on such contingent debit, as have Leland & Company. They take the approximate flat or even price of the stock at the close of the month, assuming that such cash extension, here an item of \$7,200, is approximately what Mr. Angell would have to pay to cover the stock at that time, and therefore fairly, though indefinitely, represents this additional factor of his contingent debit.

Giving a Price to the Short Position

It may appear at first as though the entry of such an indefinite item, resulting from no actual transaction of the customer, might distort the actual bookkeeping involved, but such is not the case because the entry is still only one of a bookkeeping nature. From that standpoint it really has no final effect upon the customer's balance since it is immediately cancelled out by a contra entry on the opposite side of the account at the beginning of the following month.

The credit cash extension item on Chrysler at the beginning of July is therefore seen to exactly cancel the debit cash extension of the same amount at the close of June. In exactly the same way, the cash extension credit entry of \$6,100 for the short commitment on International Nickel at the beginning of June was cancelled by a previous cash extension debit entry at the end of

May, appearing in Mr. Angell's statement for the previous month. Such entries are merely bookkeeping ones, therefore, designed to give a closer approximation of the account's actual balance, and do not truly affect the final balance at all. Since no interest is figured on such entries there is no distortion in this regard either.

We have previously seen that the balance of \$3,694.27, although entered on the debit side of the old statement, to make both sides balance, is actually a credit balance. In summarizing Mr. Angell's position and opening the new month's account, therefore, this item appears below the ruled lines as a contra entry, on its more logical credit side, to start the new month of July. This is merely Mr. Angell's cash balance, however, similar to his cash debit balance at the beginning of the month. Neither of these cash balances tells the whole story of Mr. Angell's actual position. For, besides the cash credit balance of \$3,694.27, Mr. Angell is long \$1,000 worth of Atchison bonds, and 100 shares of New York Central which, assuming that the market price is still around 192, will be worth about \$19,200. His total credits, therefore, are the sum of these items, or about \$24,000.

In other words, if he "closed out" all of his commitments, he would have that sum as a remaining credit cash balance on the books of Leland & Company.

The Opening Balance

When the month opened we saw that Mr. Angell had a net credit, if his account was entirely closed out at that time, of about \$16,000. His net equity has therefore been increased by the difference, or about \$8,000 during the month of June. Of this amount, however, \$5,000 represents the new money which he put into his account by check, and the difference of about \$3,000 represents Mr. Angell's actual gain for the month. Most of this profit was due to the advance in Steel, which was figured at only about 140 at the beginning of the month but which Mr. Angell sold at 166 around the middle of June.

At the bottom of each monthly statement, below the ruled lines

which close the balance of the previous month's statement, the customer's position is shown as of the beginning of the new month, as a sort of basis for the opening of the new statement. Thus, in the statement for July, the entries at the bottom of the June statement, and dated June 30th, will appear at the top of the statement, just as did the summary of Mr. Angell's position as of May 31st open the statement for June which we have been examining.

The discussion on which we have spent so much time in the present chapter may appear technical and confusing to the reader, but it is the basis for brokerage bookkeeping and for an adequate understanding of such bookkeeping methods in reading the broker's monthly statement and checking its accuracy. No stock market trader is under any compulsion to check over his monthly brokerage statements any more than he is to check over his bank statement each month. As in the case of the bank statement, however, it is the businesslike thing to do. Brokerage house bookkeeping is highly specialized and expert. All monthly statements are checked, rechecked and proved and it is only in rare instances that an error will appear. The same thing is true of the bank statement, however, though it still remains the customer's duty or privilege to examine and check such statements himself.

Checking the Broker's Statement

The process of checking one's brokerage statement is much simplified if the customer files his bills as they are received from the broker after each individual transaction which will affect the balance of his account.¹ When the monthly statement is received it is merely necessary to check the opening balance with the closing balance of the previous month's statement, check the individual items with the bills, memorandums and confirmations received from the broker during the month, and then check the addition and balance. Usually the customer does not check his interest items closely for they are not so great in volume as are

¹ See Page 262.

the cash debits and credits. A general perusal of the month's transactions will show whether interest is receivable on a credit balance or payable on a debit balance, and the approximate amount of either. If this tallies approximately with the actual balance interest charge either credited or debited, the account may be approved so far as mathematical correctness is concerned.

More arguments arise from disagreement between customer and broker on method, practice or execution than on difference in the balance. The customer may often feel, with some justification, that he has been charged too high a rate of interest for the month on his debit balance, or credited with too low a rate on his credit balance. The broker generally has good reasons for the rates he has set, always with the background of the actual average collateral loan rate of the month, and the customer can generally be convinced of the justice of such rates. The broker is always glad to explain his point of view or his computation on such matters and prefers to talk it over with his customer rather than to have the customer sulk and grow bitter over his secret grudge of alleged mistreatment.

Return Receipts

Generally, the brokerage house has its bookkeeping supervised and certified by a recognized firm of accountants, and such firms enclose return forms with the monthly statement to the effect that the customer has received his statement, examined it and found it correct. If there are any corrections the customer should take the matter up with his broker first without delay. Otherwise, he should sign the return form and mail it at once to his broker's accountant in the return stamped envelope enclosed for such purpose. Many customers disregard the request for such confirmation and fail to return the signed form, but it is only the part of good business and customer-courtesy to carry out the request of the broker and his accounting firm.

After the monthly statement has been read, checked and found correct, the bills from which it has been made up may be de-

destroyed. They should not be destroyed, however, until the statement has been thus checked or if there is any doubt about the correctness of the statement, since such bills are the customer's receipts for the debits and credits appearing on the report. Though the bills may be destroyed when the statement has been found correct, the monthly statements themselves should be carefully retained and filed for income tax purposes. Though such action may not seem necessary at the time the statement is received, it may very easily become of paramount importance in proving or opposing claims and adjusting disputes at some future date, possibly many years later. It is merely playing safe for the customer to keep such statements forever and never destroy them during his lifetime, for they may become extremely valuable documents to him at some long distant future date.

Commission Charges

For purposes of simplification, during our study of the broker's monthly statement we have used the usual commission charge of \$25 per 100 shares for both buying and selling. In practice, the commissions which brokerage houses charge for executing orders vary moderately between different houses, and vary considerably between stocks selling at different levels. It would obviously be unfair, as well as impractical, for the broker to charge the same commission for executing an order in a stock selling at \$7 a share as he does for a stock selling at \$210 a share.

Within certain limits the commissions charged by brokerage houses are at their own discretion, but most houses adhere to fairly stable agreements reached among the larger houses. The commission basis charged has tended to advance in recent years (despite reduction since the Stock Panic of late in 1929), with the growth of trading and the increased costs of maintaining a commission house business, including the not unimportant item of the price for seats on the principal exchanges of the country. The official minimum commission rates charged by the larger New York Stock Exchange houses are shown in the table at the top of the next page.

Stocks selling at \$	1	and under \$	10	....	\$ 7.50	per 100 shares			
"	"	"	10	"	"	25	....	12.50	" " "
"	"	"	25	"	"	50	....	15.00	" " "
"	"	"	50	"	"	75	....	17.50	" " "
"	"	"	75	"	"	100	....	20.00	" " "
"	"	"	100	"	"	200	....	25.00	" " "

Stocks selling at \$200 and over are generally charged commissions at the rate of not less than 30 cents per share, plus five cents per share additional for each \$50 up in price or any fraction thereof, beginning at \$250 per share. Commissions for executions on bonds and notes are \$2 per \$1,000 par value, except for very short-term securities. Commission rates on odd-lot executions are not less than one cent per share. The average commission house sets a minimum charge of at least \$2 for any regular transaction. In general, the smaller the brokerage house the more favorable will be the commission charges to the customer. In the case of buying or selling rights, where the sums involved are comparatively very small, minimum commissions range from less than one cent to 3¼ cents per unit of rights.

State and Federal Taxes

We have also alluded in the past to the state and federal taxes imposed upon the sale of stocks. Since it is deemed unfair, for some reason or other, to tax both buyer and seller, it is the custom to tax the seller, the theory perhaps arising from a desire on the part of the legislators to curb short selling, or to encourage buyers to hold their stock without selling. In any case, the taxation applies only to sales and not to purchases of stock. The New York state tax is two cents per share of \$100-par or no-par stock, or \$2 per 100 shares. The federal tax is the same. The taxes are levied through the purchase, by brokers or other agents, of Government revenue stamps for this purpose.

The stamps are affixed to the seller's deliver ticket, which we have seen ¹ constitutes part of the comparison between brokers

¹ See Chapter VI, p. 96.

resulting immediately from a transaction in any stock on the floor of the Exchange. The broker takes care of all this routine work but passes the stamp tax of \$4 per 100 shares on to the customer, as we have previously seen.

The state taxes vary somewhat in different states, the tax being levied by the state in which the sale is executed, no matter where the company issuing the stock has been incorporated. The charges are nevertheless fairly close to that of New York State, whose charge is the one quoted at \$2 per 100 shares. The state taxes on sale of stocks were generally first in vogue, but during the War the Federal Government also levied such a tax. Considered primarily as a war measure no special protest was made at that time, but the tax has been continued to this date. Considerable agitation is now under way for repeal of such tax, especially that of the Federal Government.

The Discretionary Trader

One more point we may touch upon as being in order in our discussion of relations between broker and customer. We have mentioned the discretionary trader earlier in this chapter.¹ The broker is glad to give advice when he is asked for it, but if the customer becomes too dependent upon his broker he is not willing to make such advice a habit. Customers who do not care to take the responsibility for managing their own accounts, or who are going on trips where they will be out of touch with the market, can usually make arrangements, through their broker's suggestion, or otherwise, to have their accounts managed by some capable individual who makes a practice of such service, for a regular fee. Such discretionary traders, as they are called, may be found in many brokerage houses, as a convenience for clients, while many of them have their own separate offices. The broker himself does not like to accept discretionary accounts but may be willing to suggest some independent trader in his office, or some individual outside of his office, to manage the account if it is large enough.

¹ See Page 249.

In opening a discretionary account the customer himself signs a mutual agreement with the trader whereby the latter is given power of attorney to act for the customer in all respects as though the customer himself were managing his own account. Methods of payment for such service differ but they are usually based upon the profits which the trader makes for his client, such profits to be

Messrs.	<u>Leland & Company</u>
Dear Sirs:	
I hereby authorize <u>Mr. John Doe</u> to buy, sell and trade in, for my account and risk and in my name, stocks, bonds and any other securities and/or commodities on margin or otherwise and in accordance with your terms and conditions; and I hereby agree to indemnify and hold you harmless from and to promptly pay you on demand any and all losses arising therefrom or debit-balance due thereon. You will kindly follow his instructions in every respect concerning said account.	
I hereby waive notification to me of any of the aforementioned transactions and delivery of any statements, notices or demands pertaining thereto and hereby ratify any and all transactions heretofore or hereafter made by him on or for my account.	
This authorization is a continuing one and shall remain in full force and effect until receipt from me of written notice of my revocation thereof.	
Dated	<u>October 7, 1929</u>
	<u>George H. Angell</u>
Form 72	

PLATE 54. A DISCRETIONARY TRADING AGREEMENT FORM

By which Mr. Angell authorizes Mr. Doe to take full charge of his brokerage account with Leland & Company.

figured at regular intervals, usually every month, and the commission paid at such times. The discretionary trader will usually charge anywhere from 10 per cent. to 50 per cent. of the profits which he makes for the customer. He assumes no financial responsibility for losses incurred, however. If any month shows a loss, that is the customer's responsibility, though in such a case the discretionary trader, of course, receives no commission for that month, since there have been no profits from which to collect his fee.

Customer Accepts Total Risk

The discretionary trader may make \$5,000 of profit for his client one month and collects his fee of perhaps 25 per cent., or \$1,250. If the account suffers \$5,000 of loss in every month for the next six months the trader collects no fees but neither does he stand any of the loss, nor does he relinquish any of his previous commissions on past profitable months, or commissions on future profitable months, after the losing streak has ended.

This is an extreme example, however, since the customer would probably terminate his agreement after the second month of such loss, and transfer his discretionary account to some other trader. The agreement by which a discretionary account is opened may be terminated by either the customer or the trader, but the latter usually demands that at least 10 days' notice be given before such termination and generally demands even longer notice than that.

The larger services giving investment advice have branched out into somewhat this same type of discretionary trading for their larger clients. They will accept the full management of individual accounts, charging a fee according to the average size and value of the account. Usually, the service will consult the customer, however, before direct executions are made, giving advice which the customer approves and then carrying out its own suggestions. The service engaged in such business, as well as the discretionary trader, may do all the direct contact work with the brokerage house, give orders and receive reports, but it also usually keeps the client well informed of the trades that have been made and the condition of his discretionary account.

The convenience of such a discretionary account is undoubted and apparent. The wisdom depends entirely upon individual conditions and circumstances. A good discretionary trader can make much more money than the customer who handles his own account. But the "good discretionary traders" are hard to find, and there is considerable risk unless the trader is known personally or is known to be perfectly honest, responsible and capable.

CHAPTER XIII

OUTSIDE STOCK EXCHANGES

New York Stock Exchange as a Model

In the consideration of the machinery and methods of action on stock exchanges in our preceding study we have held fairly close to our model, the New York Stock Exchange. As previously noted ¹ it has been advisable to do so because that exchange is the largest and most important in this country, if not in the entire world, and also because it has served as a model for most of the other stock exchanges in the United States.

We have been better able to study the subjects under discussion by reference to the practices of one specific and individual exchange and our selection of the New York Stock Exchange for such example was therefore logical. The danger in such a course is to give the reader an idea that this particular market is the "chosen and anointed" — the *sine qua non* of American stock markets.

Such an attitude is justified only to a comparative degree. There is no questioning the premier position of the New York Stock Exchange. But it would be just as unfair to leave the reader with the idea that it is our only high grade stock exchange. We have previously noted ² that practically every large metropolis in the United States now has its own security market, be it large or small, be it good or bad. As a matter of fact, these smaller exchanges, located for the most part outside of New York City, are small markets but they are also generally reliable ones and in good standing.

They have been patterned largely after the chief American model, the New York Stock Exchange, and while they can hardly come up to all of the standards, they still maintain much the same strict laws, the same careful scrutiny of listings, the same definite

¹ See Chapter II, p. 28.

² See Chapter III, p. 38.

rules for trading and the same generally high plane of business conduct that exists on the New York Stock Exchange. And their machinery is usually merely a smaller counterpart of our model, so that the study we have expended upon the details of the New York Stock Exchange has given us, at the same time, the principles upon which these outside markets are built and operate.

To differentiate them from the New York Stock Exchange these smaller markets scattered throughout the country are generally referred to as "outside exchanges," since nearly all of them are outside of New York City. The chief exceptions to this location are the New York Curb Exchange and the New York Produce Exchange, both of which are located in New York and deal in stocks.

Development of Outside Markets

From a theoretical standpoint the importance of these outside markets has long been apparent, but it is only within recent years that their importance has been recognized in practice. We have seen early in our study ¹ how stock exchanges in general, and the New York Stock Exchange in particular, were brought into being through the slow growth of an economic demand for just the service which they render. It was natural that the New York and the Philadelphia exchanges should come into being first, since they were the largest industrial cities of our early American history. But it is perfectly easy to see why other smaller and more local markets have sprung up across the entire country as one district after another developed enough industries and enough securities of those industries to make advisable the formation of a particular gathering place for exchange.

From a more practical standpoint, however, there are equally important circumstances responsible for this growth. In the first place there is the physical limitation of the New York Stock Exchange. With all of the modern machinery for speeding its work and increasing its capacity, the fact remains that the New York Stock Exchange could not begin to handle efficiently all of the

¹ See Chapter II, p. 27.

securities which have resulted from the development of American industry and which call for an active market in which their values may be ascertainable at any time.

The second practical reason for development of the outside exchanges is not so far distant from the first, but it is more important perhaps from an economic standpoint. It is the added public attention which securities may receive from being listed and traded on such outside exchanges. We know that the New York Stock Exchange still stands supreme as the model market for the securities of both large and small corporations. But the fact also remains that the New York Stock Exchange is so large, has so many issues listed, and trades in such heavy total volume, that securities of many smaller and more local industries would be veritably swallowed up by the bigness of the premier market if they were to be listed thereon.

Mediums for Smaller Issues

It would be illogical even to attempt the argument that industries and corporations of vast size whose securities are listed on the larger markets are the only securities, or the only corporations, worthy of public confidence and public investment. There are literally thousands of individual corporations scattered throughout the nation whose fundamentals are relatively just as sound as the larger and nationally known corporations whose securities take a front position on the New York Stock Exchange. Their industry is sound, their financial position is good, their management is capable, their earnings are large and their future prospects are bright. The mere fact that they are small or local companies is no reason for excluding them from public recognition, from active trading or from popular interest.

Economic Value of Outside Markets

It is through the medium of the outside markets that such corporations can most easily attain, in a smaller degree, but also in proportion to their actual corporate size, the advantages similar

to listing on the New York Stock Exchange. The small, or chiefly local, corporation, and even larger and wider ones, whose securities would be comparatively overlooked in trading on the New York Stock Exchange, find their place in the sun by listing and trading on the smaller and more local outside markets. Their sun may be somewhat less brilliant than that of the premier American market, but their place is relatively just as attractive and just as advantageous in their particular sphere.

Since we have learned the part which the stock exchange, with its listing, its publicity, its ready liquidating processes and its prestige, plays in the maintenance and gathering of investment capital for old and new corporations,¹ the advantages of the increased publicity and popular regard for certain types of stock through listing on the "outside exchanges" is readily apparent from the standpoint of economic service and value.

How to List Stocks on Stock Exchanges

In order to have any corporation's stock or bond issues listed on most of the formal exchanges it is necessary to satisfy many rather stringent rules of listing. Applications for listing, supplying all necessary information, must be made with the secretary of the exchange in question, who stands usually ready to furnish such application blanks upon proper request.

It is generally advisable to pursue such listing applications through the medium of the firm's own lawyer, since there are many legal technicalities involved. Before actual listing of securities takes place, the applications must, of course, be passed and approved by the respective Committees on Listing. The New York Stock Exchange is generally considered to have the most stringent regulations for listing, but the standards of most of the outside exchanges are patterned after it and are also high.

Some of the Outside Exchanges

It is impossible to list all of the smaller stock exchanges located throughout the country but the following tabulation shows some

¹ See Chapter II, p. 14.

of the larger and more representative outside markets of the United States and Canada:

* New York Curb Exchange	* San Francisco Curb Exchange
New York Produce Exchange	*† Los Angeles Stock Exchange
Boston Stock Exchange	*† Buffalo Stock Exchange
*† Philadelphia Stock Exchange	*† Cincinnati Stock Exchange
* Chicago Stock Exchange	*† Cleveland Stock Exchange
*† Baltimore Stock Exchange	*† Columbus Stock Exchange
*† Pittsburgh Stock Exchange	*† Detroit Stock Exchange
*† New Orleans Stock Exchange	*† Hartford Stock Exchange
Montreal Stock Exchange	*† Minneapolis-St. Paul Stock Exchange
Chicago Curb Exchange	
Toronto Stock Exchange	*† St. Louis Stock Exchange
*† Washington Stock Exchange	Standard Stock Exchange
* San Francisco Stock Exchange	(Spokane)

* List of member firms with addresses will be found in Appendix C, p. 754. † Member Associated Stock Exchanges (See Page 296).

The Chicago Stock Exchange

Perhaps one of the most important of such outside markets, certainly in the Middle West, is the Chicago Stock Exchange. This market was originally organized in 1882, which means that it will be crossing the half-century mark in 1932. Progress, as is only natural, was slow at first, but it has been almost steadily accelerated. And especially during the recent years of intense public interest in stock market trading, the progress has been among the most rapid on record from a relative standpoint.

Every section of the country is represented among the securities listed on the Chicago Stock Exchange, and it may be said to have become national in its scope. On August 7, 1929, the Exchange listed its largest single issue of stock, 27,000,000 shares, which added \$1,000,000,000 to the market value of securities listed. The Chicago Exchange has around 550 listed issues of stock, excluding bonds; daily trading has set records of over 1,000,000 shares per day; and, around the close of 1929, semi-official estimates placed the actual market value of all securities listed at over \$15,000,000,000.



PLATE 55. TRADING FLOOR OF THE CHICAGO STOCK EXCHANGE

The modern and up-to-date trading floor on which trading began April 16, 1928. Dedicated May 3 of the same year.

Such expansion on the Chicago Stock Exchange has led to increase in the number of seats similar to the increase we have previously noted in the case of the New York Stock Exchange.¹ On September 5, 1929, a 100 per cent. seat dividend became effective and the number of exchange seats was increased from 235 to 470. The new seats, ex the seat dividend, have already established new record prices of around \$50,000. Average commissions charged by the Chicago member houses are about \$15 per 100 shares of stock bought or sold, the minimum commission being generally set at \$5. The ticker system is similar to that of the New York market and there are 500 tickers in service, in about 30 cities.

The Chicago Curb Exchange corresponds somewhat to the New York Curb Exchange, only in a much smaller way. The Chicago Curb Exchange Association is only a few years old but its progress has been relatively rapid in all ways. The Chicago Board of Trade has also established a stock market of its own which has also shown rapid development since its recent commencement of operations.

The San Francisco Stock Exchange

In the Pacific Coast section the San Francisco Stock Exchange is a notable market. It was established in 1882 under the name of the San Francisco Stock and Bond Exchange but assumed its present name in 1928. The exchange consists of 75 members, and seats have sold at record prices of around \$250,000. Average trading runs somewhere around 50,000 shares per day with 1929 records of around 450,000 shares in a single day, with a market value of about \$30,000,000. The minimum commission charge of members is \$2.50 and the average commission is from \$25 to \$30 per 100 shares for either buying or selling. The commission charge for bonds is \$25 per \$10,000 par value, with odd-lot rates pro rata and a minimum charge of \$2.50.

The Exchange has been forced to enlarge its quarters in response to rapid expansion in listings and business. The former

¹ See Chapter II, p. 32.

United States Sub-Treasury building was acquired in 1928 and has been completely rebuilt, providing space for a trading floor of large proportions. A 12-story office wing has been built in the rear and the new quarters were opened early in 1930.

Sharing second honors is the San Francisco Curb Exchange which has a membership of 100 seats, selling at record prices of over \$60,000. Average trading volume is around 50,000 shares of stock per day, with a market value of \$600,000, while records have been established for trading at around 500,000 shares a day. Commission charges are approximately the same as on the San Francisco Stock Exchange and both markets operate under constitutions similar in type to that of the New York Stock Exchange.

Farther down the coast the Los Angeles Stock Exchange takes prior honors. Standards are generally high and rapid growth of recent years has resulted in the construction of a new stock exchange building which is claimed to be the largest similar unit outside of New York. The Los Angeles Curb Exchange occupies in that city a place somewhat similar to the New York Curb Exchange in New York. A new market, called the California Stock Exchange, was organized in 1929, with associate members from other exchanges throughout the country.

The Philadelphia Stock Exchange

Although it is not the largest, the Philadelphia Stock Exchange claims the honor of being the oldest organized stock exchange in the United States. This market formally opened trading in 1790. It ranks well up among the chief exchanges of the nation, with recent growth comparable to the other markets. Another new stock exchange, the Commercial Exchange, began business in Philadelphia during 1929. Firms may hold memberships in both the old and the new exchange without conflict.

The New York Curb Exchange

Any discussion of American stock exchanges outside the New York Stock Exchange would be sadly incomplete without con-



PLATE 56. TRADING FLOOR OF THE SAN FRANCISCO STOCK EXCHANGE

The new quarters were opened and dedicated in 1930, and are among the most modern in the world. Beside the building housing the main trading floor stands the new 12-story administrative wing.

sideration of the New York Curb Exchange. In fact, though it must rank second to that market, the New York Curb easily takes the immediately junior place in the list of the largest and most important stock exchanges in this country. Its evolution from the humble beginning as an outdoor market, which later gave it the name of the Curb, is one of the most rapid and striking advances in modern stock market history.

The direct predecessor of the present Exchange was wont to meet in William Street, between Exchange Place and Beaver Street, in the Civil War period. After several other moves the market gathered regularly about opposite the Wall Street Journal Building, in Broad Street, just south of Exchange Place. From 1900 to 1920 this picturesque market grew rapidly. There was always a great crowd of traders in the street, wearing brilliant headgear that they might easily be spotted by their clerks and offices in adjoining windows, with whom they communicated by a rapid and mysterious code of sign language.

Rapid Growth

The War and post-War periods gave this junior market such an impetus that outdoor trading became impractical, and on June 27, 1921, the New York Curb Market moved into its modern and present building on Trinity Place, between Rector and Thames Streets. A new and much larger 14-story building is now under construction over the present Floor. When opened in 1931 the new Floor will be the largest in New York City.

Listings consist of around 2,000 stock issues and 500 bond issues, foreign and domestic, though the Curb does not list any issues traded on the New York Stock Exchange. The market took the name of the New York Curb Exchange in 1929. Its ticker service consists of around 2,600 instruments, carrying price quotations to 100 cities throughout the country. It has its own clearing house, patterned after that of the New York Stock Exchange (which we have studied in detail) and clearing around 500 separate issues, or about 75 per cent. of total trading volume.

From a loosely organized group of outside traders, dealing in "War Brides" and highly speculative issues, the New York Curb Exchange has advanced in little more than a decade to its present highly regarded position among the chief security exchanges of the world. Testimony to its advance is the gain in the price of seats from a mere \$250 in 1918 to a high of around \$300,000 in 1929. Trading volume has increased from 15,000,000 shares in 1921 to an annual volume of around 500,000,000 shares in 1929 and daily trading has set up new high records at over 7,000,000 shares in a single session. Commission charges of Curb brokers generally run from around \$12.50 to \$20 per 100 shares on stocks selling between 10 and 100.

The third security exchange in New York is the New York Produce Exchange, which began trading in stocks in 1928. It is the newest and smallest of the three and while its advance has been satisfactory, it still occupies a junior place in the list of important American security exchanges.

Associated Stock Exchanges

Mention has previously been made of the Associated Stock Exchanges,¹ and this voluntary association numbers in its membership about 15 of the larger local stock exchanges outside of New York City. The purpose of the association is to suggest a basis for standardization of machinery, constitution, management, commissions and many other channels of stock exchange conduct, as well as to centralize activities of a protective, publicity or advertising nature. On the other hand, there is no insistence upon such standardization, within fairly wide bounds, and the individual exchanges all have their own constitutions, their own officers, rules and commission charges, and are, in all ways, perfectly free to conduct their own business and management.

Notation is made in the list of outside stock exchanges on page 292 of those exchanges which are members of the Associated Stock Exchanges. The group is a rather loose organization, as has pre-

¹ See Chapter III, p. 38.

viously been suggested, and serves its members chiefly by providing centralized advice, standardization and union for protection and publicity. Many, if not the majority, of the members of these individual stock exchanges are also members of other exchanges, including the New York Stock Exchange and the New York Curb Exchange.

Commission rates of the member stock exchanges in this association are fixed entirely by themselves but are generally in line with most other exchanges. Average commissions of the members range from \$15 to \$25 per 100 shares for either buying or selling, and minimum commissions are from about \$1 to \$3 with the average at about \$2.

The reader will realize that even short histories of all or most of the outside stock exchanges cannot practicably be included in such a volume. There are many other local markets which conform to high standards, enjoy very good reputations and serve their economic purposes to a high degree.

Assurances of Reputable Listing

Even without consideration of the ready marketability which listing of corporation securities on a formally organized stock exchange brings to the investor who buys such securities, he should see the advantage of discrimination in his purchases even if only because of the high degree of comparative safety which listing on such markets indicates.

All of the better stock exchanges, with only a few unfortunate exceptions, maintain high standards of brokerage conduct and scrutinize carefully every security and corporation before admitting it to listing and trading on the exchange. Such listing does not guarantee stock market advances, of course, nor does it guarantee the successful management of any corporation, but it does give fairly good indication of the comparative honesty and good faith involved in the corporation and its securities, and such listing places a seal of comparative acceptability upon any security listed.

Playing Safe

The fly-by-night promoter, the bucket shop in modern dress, the fraudulent stock salesman and dishonest broker — these are always with us. In the channels of what purchasers thought was “true investment” perhaps almost as much money has been lost through dealing with unreliable brokers as through actual misjudgment of a corporation’s future. It is of paramount importance that the individual who is going to trade in stocks, whether for speculation or investment, should do so through a commission house, bank or broker who he is fairly certain is reliable.

There is no iron-clad rule upon which to base one’s judgment of the honest broker, but in comparative degree the rule tends to be that one plays safe by dealing only through brokerage houses which are members of duly organized and “reputable” stock exchanges. There are exceptions, of course, in the case of banks and other strong houses which are well known to be perfectly reliable, whether they are members of an exchange or not. But the rule is about the best and safest that can be generally applied.

Strict Regulations of Reputable Exchanges

Its validity depends also, naturally, upon how “reputable” the exchange is to which the broker belongs. At the top of the list stands the New York Stock Exchange, and so thorough is its supervision, so strict are its rules and so swift and serious are its punishments, that membership in that market is almost a perfect guarantee that the member house is reliable. This applies, of course, to all branches of such member house, no matter where located, since the branch is generally as strong as the home office which stands behind it. An unofficial list of member firms of the New York Stock Exchange will be found in Appendix B on page 718.

On down the line, then, the degree of reliability for this guarantee grows smaller with the repute of the stock exchange concerned. To be specific, it may be said that, while no guarantee may be given, any firm which is a member of such individual ex-

changes as have here been expanded upon ranks fairly high in brokerage circles, and such membership may be construed as a recommendation for the firm's responsibility.

An Aid in Judging Reliability of the Broker

It is not the purpose of this volume to serve as an advertising medium for any stock exchange or its individual members, but it *is* the purpose of the volume to make itself as useful to the average reader as possible. And it has been the experience of the author, in many years of investment counsel, that such average reader is definitely interested, as is purely logical, in the reliability of the broker through whom he conducts his stock market operation.

A List of Listed Brokerage Houses

In at least a partial answer, and perhaps in only an imperfect way, to such public demand, a list of the members of some of our more important American stock exchanges will be found tabulated in Appendix C, on page 754. The lists in Appendixes B and C have been compiled carefully from records published by the exchanges in question, without direct assent or confirmation from the firms themselves, and no responsibility is assumed for the correctness or completeness of such lists. Where possible the addresses of members have also been given to assist in identification, and branch offices, with addresses, have also been included.

While disclaiming any responsibility for errors or omissions, it is hoped that this list of exchange members, used in connection with the map of New York City's financial district, in cases of firms there located, will be of definite assistance and valuable aid to the individual seeking information on present or prospective stock commission brokerage houses.

Conclusion of the First Part

In concluding the first section of our study of stock market theory and practice, we may hope that the reader is now familiar

with his raw materials and the tools with which the market operator must work. With our groundwork thus securely and thoroughly laid we may go on, in our second part, to a more detailed consideration of how to use these raw materials and these tools. Having become familiar with our workshop, we may go forward to the work. Having served our apprenticeship, we may go on toward practical mastery of our art — the art of successful stock market operation.

PART TWO

CHAPTER XIV

TYPES OF CORPORATE SECURITY

From Practice to Theory

In previous chapters we have paid special attention to the physical machinery involved in the buying and selling of stocks, in order to be sufficiently familiar with that machinery to be able to use it efficiently, intelligently and effectively. In the succeeding chapters we shall pay more attention to the securities themselves which are handled by our complicated machinery, to the origin and use of those securities, especially common stocks, and the reasons for buying and selling them.

And in order better to judge the worth of common stocks, we must know the rest of the family — the heredity, if you please. We must know the parentage, the family tree, the older and younger brothers and sisters of the particular individuality in which may lie our chief interest.

At the beginning of our studies we tried to impress upon the reader the fundamental consideration of stock as a personal part ownership of physical and productive property.¹ In the technical discussion of machinery, methods of trading, and even of values, we are too prone to think of the stock certificate in an impersonal way, merely as an instrument for "market profits," and to forget the fundamental considerations which give it its true value. Since it is merely a "part" ownership, however, we must survey the other part ownerships which go to make up the whole value of a going and productive physical property, in order to know what claims to the total value are held by the other interests, and what claims to the total value are vested in our own particular stock certificate.

We are sufficiently familiar with the factor of ownership which is the basic property of stock. The corporation raises its money

¹ See Chapter I, p. 4.

to do business at least partly through sale of the small divided portions of its total ownership, in the form of stock certificates. But it does not usually raise all of its capital in this way. It also borrows money from individuals, to whom it gives a promise to repay the loan, in the form of a bond.

Ways of Raising Corporate Capital

Thus the average corporation raises the money with which to conduct its business, or its capital, in two main ways: by the sale of bonds and of stock. But it is necessary to note the differentiation between these two forms of corporate capitalization. From the standpoint of the corporation, sale of its bonds constitutes the borrowing of certain sums of money, which certain sums are guaranteed to be repaid at certain maturity dates of the loan, while sale of the corporation's stock, from the corporate standpoint, constitutes the partition and sale of actual ownership of the business. The price which the corporation receives for its stock is indefinite, and so is the price at which it may some day be redeemed. There is no actual maturity date for stock since it is not a loan, as are the bonds, but sale of actual partnership in the business.

From the standpoint of the security buyer, the corporation bond represents a loan by him to the corporation, due and payable at a certain sum, with interest, at a certain date, while purchase of stock, from the standpoint of the buyer, represents the purchase of part ownership in the actual business itself. Purchase of stock is not a loan, from the buyer's standpoint — it is "going into business" for oneself, by the investment of capital in a venture which guarantees no definite return and may therefore yield nothing, including possible loss of the capital invested, or may yield infinite profit, besides growth of the original capital invested.

Just as a private individual in business would have to pay off his direct loans before he could figure the value of his ownership or assets, so the bonds of a corporation, being merely borrowed loans, must be paid off first before the holder of stock, or the part

owner, can arrive at his own remaining assets, or equity in the value of the business. Thus, the bonds of a corporation have a prior claim on its assets. Partly for this reason, the corporation's bonds are much safer than its stock.

The Corporation Bond

Since the bonds are in the nature of a loan, they are issued in various stated amounts, with definite interest, and for various maturities, on which dates the loan is guaranteed to be retired, with repayment of the original loan, or value of the bond, plus interest accrued. Just as in the case of any note or other loan instrument, the bond is nothing but a promise to repay at some future stated date a certain amount of money, with a certain rate of interest during the life of the loan, or bond. And just as loans or notes may be made with or without security, so bonds may be issued with or without security.

Generally, the corporate bond is definitely "secured" by a mortgage on some tangible property owned by the borrowing corporation. The value of such security, as in the case of other loans or notes, is expected to be well above the face value of the loan, or the total amount of bonds secured by the property in question. Bond mortgages are usually "closed" mortgages; that is, no additional or junior bonds may be issued with the same property mortgaged as security. In the case of open mortgage issues, or "open end mortgage bonds," the mortgage allows for the issuance of certain additional bonds secured by the same mortgage. A first mortgage bond is secured by a first mortgage. A second mortgage bond is secured by a second mortgage. Consolidated mortgage bonds are secured by the consolidation of two or more separate mortgages.

Types of Bond

Unsecured bonds are not secured by any definite claim on specific property of the borrowing, or issuing, corporation. Such bonds are generally a direct liability of the corporation, however,

and are therefore indirectly secured by the entire property and assets of the corporation. A debenture bond is one which is not directly secured by mortgage or pledge of specific property, and on which interest is to be paid only out of earnings. Such a bond is, of course, less completely secured than other bonds, is usually a "junior" bond, subject to preceding claims of other bond issues, is not so attractive from an investment standpoint, and therefore generally pays a higher rate of interest.

A collateral bond is secured not directly by actual pledge of physical property, but by the pledge, usually on deposit, of other securities, including either all one issue or several issues of bonds, or various combinations of bonds and stocks. The bonds pledged as collateral are generally in turn secured by the pledge or mortgage of actual physical property. The collateral pledged on a collateral bond need not necessarily be made up of the securities of the corporation issuing the bond, but it usually is in practice.

Refunding Issues

A gold bond is one whose principal and interest are payable in gold, on demand for such payment, rather than in paper money or other credit or cash instruments. Just as an individual loan becomes due at maturity but is sometimes renewed if agreeable to both borrower and lender, so a corporation bond, becoming due at maturity, is often renewed if agreeable to both the corporation and the bondholder. In such case, the old maturing bond is paid off with a new bond, sometimes at the same interest rate, sometimes at a higher or lower interest rate. This type is called a refunding bond issue. The holder of the old bond has the right to demand payment in cash at maturity and retirement of his loan, but in such case the corporation will retire the loan or bond by cash received from the sale of that particular amount of its new refunding bonds to some other investor. In order to insure acceptance of its refunding bond issue by most of the old holders, the corporation will, of course, try to make its interest rate and other characteristics of the new bond equally attractive to the holders of the old ones.

Profit-Sharing Bonds

During the period of stock popularity, which means partly the sharing in high corporation profits to receive a higher yield than generally available on bonds, which period began to develop in about 1924, some corporations experienced difficulty in selling or "floating" their fixed interest bond issues. There has been a moderate movement, therefore, toward giving the purchaser a speculative chance of receiving a higher interest rate on his loan than the basic rate.

This tendency has manifested itself in the development of "profit-sharing bonds." In such issues, the corporation guarantees a certain fixed minimum rate of interest, with the further proviso that if it be practicable, under certain stated conditions of surplus profits, the bonds will share in profits by receipt of interest above the minimum rate.

Usually, such profit-sharing is limited to from one to three per cent. over the guaranteed minimum rate. It is not a rule, but such profit-sharing bonds are often of the more speculative variety, issued by corporations whose business is speculative, and whose asset security and profits are not of the strongest or most dependable. Another aspect of this principle of profit-sharing is found in issuance of convertible bonds or bonds with rights. These types are discussed later in the chapter.¹

Equipment bonds are those issued with equipment, rather than permanent physical property, as their security. This type of bond has been used chiefly by railroads or corporations having railroad or rolling stock, in the form of cars and locomotives. Equipment bonds have in general been a high type of issue, because their security has a more liquid value than specialized physical property, and because such issues usually carry retirement clauses calling for periodic partial repayments of the loan or calling for repayment of the bonds. The total debt, therefore, is reduced more rapidly than the value of the equipment by which the debt is secured, and the margin of security for the remaining bonds grows constantly larger and stronger.

¹ Page 322.

Installment Repayment of Bonds

Mention of the retirement clause in connection with equipment trust bonds brings us to various methods of retiring portions of a bond issue before maturity of the entire loan. Just as an individual often plans or hopes to get out of debt gradually by repayment of part of his loan, so the corporation often plans to pay off part of its debts through retirement of its bonds. Such retirement may take the form of bond issue in serial maturities, or retirement through sinking fund operation.

In the case of serial bond issues, the issue is composed of various maturities, so that a certain portion of the entire bond principal comes due each year, or every few years; and the entire issue, or loan, is therefore retired gradually. In the case of sinking fund bonds, the maturity for the whole issue is usually the same date, but provisions are made for calling the bonds, or any portion thereof, for payment before that maturity date, or the issuing corporation merely lets its sinking fund accumulate so that it gradually approaches the total amount of the bond issue. Provisions of a sinking fund vary widely in practice, but they generally call for setting aside each year, out of the corporation's profits, when there are sufficient profits, a certain percentage for the corporation's sinking fund.

The Sinking Fund

This fund may be used to call a portion of the company's bond, in which case such bonds are called by equitable "drawings" of numbers of the bonds, much as in a raffle, or the sinking fund may be reinvested in other high grade bonds or sterling securities, provided that the fund is always on hand to retire its amount of the corporation's bonds. The sinking fund may also be used to purchase quantities of the corporation's own bonds in the open market. These are then either cancelled and retired or held in the company's own treasury, either course achieving the same end, virtual retirement of a portion of the company's bonded, or "funded," debt.

Maturity of the Bond

Bonds may also be classified according to their maturity. We have seen that since the bond is merely the corporation's promise to repay a loan, such repayment must be provided for at a certain date, in the provisions of the bond, just as in the case of a loan. The "maturity" of a bond is the date upon which it matures or on which repayment of the loan is due and payable, and may be demanded by the bondholder or lender. A short-term, or short-time, bond is one whose maturity is in the comparatively near future, while a long-term, or long-time, bond is one whose maturity is comparatively far in the future. There is no rule of definite demarcation, but a short-term bond generally matures in five years or less and the long-term bond in six years or over. The term is used generally as applied to the maturity when a bond is issued, but long-term bonds are often considered to be short-term issues when they approach to within a few years of their maturity.

Many bonds, chiefly of the long-term variety, have provisions for redemption before maturity, at certain stated prices and usually at the discretion of the issuing company, or borrower, and are called redeemable, or callable, bonds. The call, or redemption, price, is the price at which such bonds are callable, or redeemable. Other bond issues, comparatively rare in number and volume, have no definite maturity date and are called perpetual bonds. If such bonds also have no provisions for redemption, they are irredeemable, perpetual bonds, and theoretically will never be repaid.

There are many other types of less common bond issues, to say nothing of more detailed specifications and differentiation, which we shall omit for lack of space as well as for lack of their necessity in understanding the relation of bonds and stocks in corporate capitalization. Perhaps the best known and most widely approved study for the individual interested in further study of the bond field is the volume by Lawrence Chamberlain, "The Principles of Bond Investment." This work has long been known as the "Bible" of the bond market and has recently been revised

in collaboration with Prof. George W. Edwards, of New York University.¹

Negotiability of the Bond

In the case of a personal loan, or a note, the borrower pays his interest at stated intervals direct to the lender. So does the corporation which borrows money from the individual who holds its bonds. A bond has a stated, definite value of principal, as well as a stated definite interest rate, and therefore the bond may be used as an instrument of trade, passing rapidly from one owner to another. Due to its definite value and fixed rate of interest it is not necessary that the issuing corporation know who owns its bonds. They do not come due for perhaps 100 years, but the principal amount of the bond and its fixed interest rate remain the same. Rather than keeping a list of the bond owners, therefore, and sending them checks for their interest at periodic intervals, bonds are generally issued "in blank," or payable to bearer, so that they are extremely negotiable as to both principal and interest.

Coupons as Interest

Practically all bonds carry, attached to the certificate itself, a series of what might be called checks of the issuing corporation, promising to pay on certain periodic dates, throughout the life of the bond, a certain stated sum, amounting to the periodic interest due on the bond. These checks, or promises, or interest certificates, are commonly called coupons. They may be detached, or clipped, when each separate coupon becomes due and payable, and presented to any bank, just as a personal check, for deposit and collection. In the case of tax-free bonds the owner must also fill out an ownership certificate for each separate type of bond coupon deposited, for income tax purposes, in order that the tax may be collected from the corporation. Plate 59 shows one of such ownership blanks.

¹ See Bibliography, page 834.

	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	NOV. 1938 23
	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	MAY 1938 22
	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	NOV. 1937 21
	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	MAY 1937 20
	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	NOV. 1936 19
	ON THE FIRST DAY OF UNLESS THE DEBITURE HEREIN MENTIONED SHALL HAVE BEEN CALLED FOR REDEMPTION OR BEFORE THAT DATE AND PAYMENT THEREOF DUTY PROVIDED FOR. Remington Rand WILL PAY TO BEARER AT THE HEAD OFFICE OF THE NATIONAL CITY BANK OF NEW YORK, IN THE BOROUGH OF MANHATTAN, CITY AND STATE OF NEW YORK OR AT THE OPTION OF THE BEARER AT THE PRINCIPAL OFFICE OF THE MARINE TRUST COMPANY OF BUFFALO, IN THE STATE OF NEW YORK, THE SUM OF 50,000 DOLLARS IN GOLD COIN OF THE UNITED STATES OF AMERICA AND NOT SUBJECT TO ANY NORMAL FEDERAL INCOME TAX WITH RESPECT HEREON IN EXCESS OF TWO PERCENT OF SUCH SUM, BEING SIX MONTHS INTEREST THEN DUE ON ITS TWENTY-YEAR 5 1/2% DEBTURE, SERIES A, DUE MAY 1, 1942. <i>mv-apps</i> NOM 000000 TREASURER	MAY 1936 18

PLATE 58. SAMPLE BOND COUPONS

A strip of coupons detached from the Remington Rand bond certificate shown in Plate 57, paying semi-annual interest on this issue.

The receiving bank sends the coupons, through channels similar to those for checks, for collection from the corporation's disbursing agent, who, by the date such coupons are due, has received sufficient cash to honor all outstanding coupons. If a corporation fails to honor, redeem or pay its bond coupons, it is said to have "defaulted" such payment. A corporation will extend every effort and means to honor its bond coupons as they become due and are presented for payment, since defaulting such interest is

FORM 1000 U. S. INTERNAL REVENUE Revised January, 1930		OWNERSHIP CERTIFICATE TO BE USED BY A CITIZEN OR RESIDENT INDIVIDUAL, FIDUCIARY, OR PARTNERSHIP IN CONNECTION WITH INTEREST ON BONDS OF A DOMESTIC OR RESIDENT CORPORATION CONTAINING A TAX-FREE COVENANT									
DEBTOR CORPORATION NAME <u>Blank Company</u> ADDRESS <u>New York</u> NAME OF BOND <u>Refunding Gold 6's of 2000</u> Date interest was due on the above bond <u>Jan. 1, 1930</u> Date paid <u>Jan. 1, 1930</u> I certify that to the best of my knowledge and belief the information entered hereon is correct. <u>John Doe</u> (Signature of owner, fiduciary, or agent) (Address of owner or agent)		OWNER OF BONDS (Name must be legible) NAME <u>John Doe</u> STREET <u>100 MAIN STREET</u> CITY <u>NEW YORK</u> STATE <u>NEW YORK</u> <table border="1"> <thead> <tr> <th>CLASSES OF BOND OWNERS ACCORDING TO NET INCOME</th> <th>AMOUNT OF INTEREST RECEIVED</th> </tr> </thead> <tbody> <tr> <td>1. Individual or fiduciary whose net income does not exceed the personal exemption and other credits</td> <td>No tax paid by corp.</td> </tr> <tr> <td>2. Individual or fiduciary whose net income in excess of the personal exemption and other credits does not exceed \$4,000</td> <td>1½% tax paid by corp.</td> </tr> <tr> <td>3. Individual or fiduciary whose net income in excess of the personal exemption and other credits exceeds \$4,000 or a partnership</td> <td>2% tax paid by corp.</td> </tr> </tbody> </table> Note.—If you discover at the close of the year that the interest was not entered on the proper line above, you should prepare on or before February 1 of the following year an amended certificate on this form and forward it to the corporation which issued the bonds.		CLASSES OF BOND OWNERS ACCORDING TO NET INCOME	AMOUNT OF INTEREST RECEIVED	1. Individual or fiduciary whose net income does not exceed the personal exemption and other credits	No tax paid by corp.	2. Individual or fiduciary whose net income in excess of the personal exemption and other credits does not exceed \$4,000	1½% tax paid by corp.	3. Individual or fiduciary whose net income in excess of the personal exemption and other credits exceeds \$4,000 or a partnership	2% tax paid by corp.
CLASSES OF BOND OWNERS ACCORDING TO NET INCOME	AMOUNT OF INTEREST RECEIVED										
1. Individual or fiduciary whose net income does not exceed the personal exemption and other credits	No tax paid by corp.										
2. Individual or fiduciary whose net income in excess of the personal exemption and other credits does not exceed \$4,000	1½% tax paid by corp.										
3. Individual or fiduciary whose net income in excess of the personal exemption and other credits exceeds \$4,000 or a partnership	2% tax paid by corp.										

PLATE 59. SAMPLE OWNERSHIP CERTIFICATE

To accompany coupons deposited, or presented, for payment on tax-free bonds, where the owner claims exemption from income tax on such interest.

tantamount to admission that the company is insolvent, and receivership proceedings usually result.

Although most bonds are issued in blank, or to bearer, and are readily negotiable, provisions are almost always made for registration of bonds. A registered bond is one whose true owner is registered with the issuing corporation just as is a stock. In such case risk of losing the bond certificate and having someone else collect on it is minimized, if not made impossible. The coupons are also registered, and payment of both interest and principal will be made only to the individual or his order in whose name the bond is registered. Such registration also causes considerable delay in sale, redemption or transfer, to say nothing of reducing its negotiability, and is only justified under special circumstances.

Most bonds pay interest only every six months, so that there are two coupons attached, dated six months apart, for each year

of the bond certificate's life. Such interest is payable at the end of each period and not in advance. Since the entire period's interest is payable to the bearer, or owner, at the close of that period, adjustments must be made in the price paid for a bond.

Adjusting Bond Interest at Purchase

For example, let us assume that Mr. Angell buys a \$1,000 bond paying six per cent. per annum, and that he buys it with the interest coupons due on January 1st and July 1st of each year of the bond's life. Let us also suppose that Mr. Angell buys his bond at 101, or a total of \$1,010, on April 1st. The previous owner of the bond has undoubtedly clipped and cashed the January 1st coupon of \$30, and Mr. Angell will cash the next one, for \$30 on July 1st, if he holds the bond that long. But in such case Mr. Angell would receive the whole six months' interest from January 1st to July 1st, though he is only entitled to half that interest, or \$15 for the interest from the date he bought it, April 1st, until the July 1st coupon is due.

The adjustment is made when Mr. Angell buys the bond. He will pay \$1,010 for the bond, plus the commission, plus \$15 for "accumulated interest." Since this method is used in adjusting interest in addition to the price actually paid for a bond, bonds do not go "ex-dividend" as do stocks. In rare cases, when such adjustments are not made, the bond is quoted "flat."

The Corporation Note

A corporation's "note" is quite similar to its bond, but is generally issued for a short maturity. A corporation note is little different from a common or commercial note. Corporation notes may be secured but usually they partake of the nature of a debenture and depend for security upon the general strength of the issuing corporation. When secured at all, notes are generally secured by collateral rather than mortgage of physical property. Corporation notes are more informally drawn than bonds, due to

their short maturity. They are generally issued for short-term financing or when the money market is temporarily unfavorable to long-term bond issuance. When such conditions again turn favorable, the notes are likely to be called, or else they mature at an early date and the temporary financing can be replaced by the more stable long-term bond.

We have previously seen that the fundamental difference between bonds and stocks in corporation capitalization is the difference between the creditor and the part owner from the owner's standpoint, and the difference between borrowing money and taking in another partner in the business from the corporation standpoint. It is perfectly plain that lending and borrowing money is a much more definite process so far as return is concerned than is part ownership of a business. Bonds, or the loan, must be repaid as agreed upon or the corporation goes bankrupt. No definite payment, or even return of capital, is called for in stock issuance, or ownership, however. The bonds are very decidedly senior claims on corporate assets to the claims of stock. On the other hand the common stockholder, though he is not guaranteed anything, stands to get an infinite profit or return from his investment as a partner in the business.

Bonds vs. Stocks

In other words, the bondholder is merely a creditor. He runs no risk. He is assured of receiving his principal back, and stated rate of interest, but he is also certain to receive nothing more than that. The stockholder, on the other hand is a part owner of the corporation. He it is who runs the risk. He is not guaranteed the return of either principal or interest, but he has the chance, as a part owner, of receiving not only such principal and a fair rate of interest, but of reaping almost infinite potential profit if his business is successful.

There are nearly as many individual kinds of stock in use as there are types of bonds. Fortunately, however, there are only two *main* types of stock. They are preferred stock and common stock. Our remarks about the stockholder being a partner in the

business and sharing in either "feast or famine" are directly applicable to the holder of common stock, but not so much to the holder of preferred stock. The preferred stock issue occupies a middle ground between the bond and common stock. It partakes of various qualities found in each of these extreme securities. The preferred stock is not so safe as the bond but generally is safer than the common stock.

Preferred Stock

The preferred stock is junior to the bond and senior to the common stock. In other words, its claims come after those of the corporation's bonds but before those of the common stock. The preferred stock is similar to the bond in that it generally has a fixed rate of interest, called its dividend, and will pay that dividend if it is at all possible or practicable, but will not yield additional income, no matter how prosperous the company may become or how large the corporate profits may be. The preferred stock is similar to the common stock in that ownership of the former usually implies part ownership rather than the status of a creditor, that dividends on the preferred are much more dependent upon the prosperity of the corporation, and in that failure to pay preferred dividends is not unusual and does not destroy the corporation's credit and lead to receivership the way default of interest on a bond issue would.

Preferred stock is generally issued at a certain dividend rate. The holders may expect to receive that dividend return if the company is able to pay it out of current profits, but may not expect to receive more than that dividend rate, all surplus profits going to the common stock.

Par Values

For purposes of valuing its stock liability to the owners of that stock, most corporations formerly set a nominal value upon their shares, called a "par value." The term is used to denote the nominal, or normal, value of the company's stock. Most such

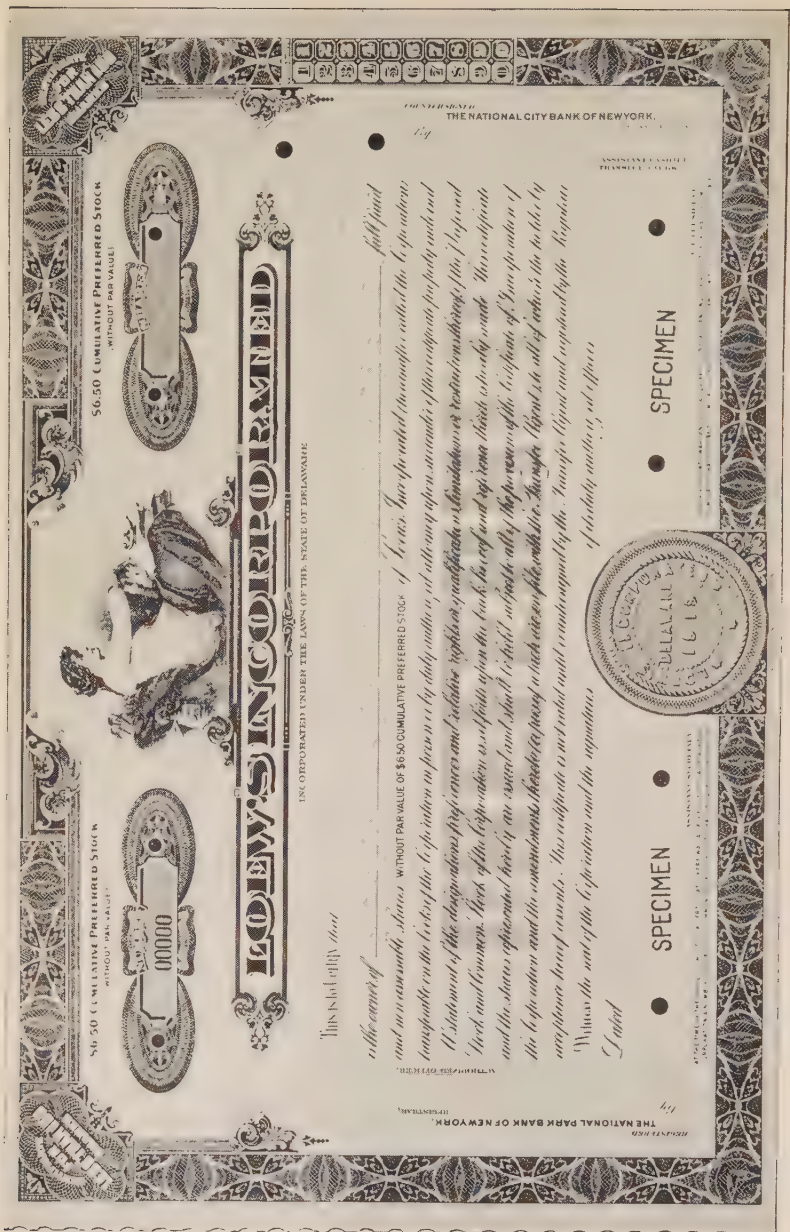


PLATE 60. SAMPLE PREFERRED STOCK (CERTIFICATE)

Lowe's, Inc., \$6.50 cumulative preferred, with warrants. The warrant on this certificate has been detached from the left hand side, and is shown separately in Plate 62.

stocks have a par value of \$100 per share. The par value is generally the basis upon which the company figures its liability to stockholders in its balance sheet. It has no direct relation to the actual selling price of a stock, except to indicate whether the public values a certain stock higher or lower than the corporation itself does.

So much mental confusion appeared with regard to the nominal or par value of corporate stocks in the public mind that there has been a decided tendency in recent years toward substituting stock of "no-par value" for stock of some definite par value, chiefly in the case of common stocks. The par value of preferred stocks is still useful in determining the dividend rate, though it is not necessary. For instance, a six per cent. preferred stock would pay \$6 per share per annum if its par value were \$100 per share. On the other hand, if its par value were only \$10 per share it would pay only 60 cents per share per annum, and still be called a six per cent. preferred stock.

We have previously stated that the par value of a stock has no direct relation to its actual selling price, and this fact is too often overlooked by the average stock market purchaser. If a preferred stock of \$100 par value is paying regular dividends of six per cent., then that is its yield only if the stock happens to be selling at its par value of 100. If it happens to be selling for over 100 then the dividend yield is less than six per cent., and, conversely, if it happens to be selling at less than its par value of 100, then the dividend yield is more than six per cent. This is true, of course, in the case of common stocks, also. This important consideration will be further expanded in a later chapter.¹

No-Par Values

Where stocks have been issued without par value, the importance of price as well as dividend is perhaps better impressed upon the public mind. In such case the stock goes by the name of its actual cash dividend, rather than its per cent. dividend on the par value. For instance, the six per cent. preferred stock

¹ See Chapter 17, p. 412.

mentioned above, with a \$100 par value, would pay the same dividend, and be to all practical purposes the same, as a \$6 no-par preferred stock. Both would yield six per cent. if selling at 100. Both would yield more than six per cent. if selling below 100 and less than six per cent. if selling over 100. As has been previously noted, the tendency from par value stocks toward no-par value stocks has been chiefly apparent during recent years in common issues.

Preferred stock may be either cumulative or non-cumulative. In the former case, passing, suspension or omission of the preferred dividend does not cancel the obligation to pay such dividend, but merely suspends that obligation. The assumption in such case is that when the company returns to a state of normal prosperity it will repay all the "back dividends" or "accumulations" on the preferred stock for the periods in which no dividend was forthcoming. In practically every instance it is provided that all back dividends on cumulative preferred stock must be paid up before any payments may be made on the common stock. In practice, when a company gets so far behind that accumulated dividends on its cumulative preferred stock sometimes run as high as \$100 per share and over, the corporation will evolve some recapitalization scheme whereby the holders of the old cumulative preferred stock will accept additional preferred or common stock in place of actual cash on account of the accumulated dividends owed the holder by the corporation.

Cumulative Dividends on Preferred Stock

There are plenty of recent examples of this sort, including such companies as Goodyear Tire & Rubber Company, International Mercantile Marine, Otis Steel, United States Leather, etc. International Mercantile Marine cumulative six per cent. \$100 par preferred stock had not paid dividends since 1923. There were accumulations of more than \$80 per share and it was foolish to expect the company ever to pay out such a large amount of actual cash. The situation has been easily repaired, however, by a recapitalization plan which went into effect in June, 1929. Under

terms of the plan, both the old common and preferred stocks have been replaced by new common stock.

The holders of the old preferred stock received one share of new no-par stock and \$25 cash for each share of old stock, thus waiving their claims to any further accumulated cash dividends on their old cumulative preferred stock. Common shareholders, on the other hand, whose equities in the assets of their company were junior to the large previous claims of the preferred stock on account of accumulated back dividends, suffered to the extent that they received only one new share of common stock for each five shares of old common stock held. Thus were all back dividends cleared up on the old International Mercantile Marine cumulative preferred stock, and thus was its previous profit and loss deficit turned, by a simple process of recapitalization, into a profit and loss surplus.

On the other hand, there is American Brown Boveri Corporation, which paid no dividends on its \$100 par, seven per cent. cumulative preferred stock for about two years, resulting in accumulations of about \$14 per share in back dividends. The issue was a small one, however, and the company earned over \$20 a share on the preferred stock in 1928 alone, so instead of having to resort to a recapitalization plan, the company merely paid up all accumulated dividends on its preferred stock by a single payment of \$14 per share in June, 1929.

Non-Cumulative Dividends

Non-cumulative preferred stock, as might be assumed, does not carry a permanent liability for preferred dividends which have been passed. If directors decide that current earnings (or the asset position of the company) do not justify payment of the regular preferred dividends on their non-cumulative preferred stock, they may pass such dividends without any further liability. It is assumed that directors will resume such dividends at the earliest possible date, and that nothing shall be paid on the common stock until payments have been resumed on the preferred. But when such dividends are resumed the past omissions are

forgotten and no payments need be made for accumulations or arrears.

This type of stock is not so satisfactory to the preferred stockholder as is the issuance of cumulative preferred, as it is open to charges of prejudice and unfair dealing in favor of the common stock. Directors may not pay dividends on the common while none are being paid on the preferred, but they may begin payments on the common as soon as payments have been resumed on the preferred. There have been instances where directors appear to have favored the common stock by suspending payments on their non-cumulative preferred stock to allow profits to accumulate to such a degree that within a year or two they could resume payments on both preferred and common together. The spirit of the law in this regard would have been to favor the preferred stock by continuing dividends on the latter, even though it meant that dividends on the common would not be forthcoming at so early a date.

Participating Preferred Stock

We have previously stated that preferred stocks have a fixed rate of interest or dividend. This is true in most cases but there has been a recent tendency toward profit-sharing with the preferred stock similar to that previously found in profit-sharing bonds. Profit-sharing preferred stocks are usually termed "participating." They may participate on various bases, by paying either an extra one or two per cent. on par value stocks, or an extra one or two dollars on no-par value preferred stocks; or they may receive a certain percentage of total profits, or, more likely, total dividends, otherwise accruing to the common stock; or they may receive an amount over their regular stated dividend, equal to the amount paid on each share of common stock, generally up to a certain amount, after which the common issue receives all surplus dividends.

A case in point is the preferred stock of International Match Corporation. The common stock is almost entirely held by the Swedish Match Company, but the public considers its preferred

even more attractive than the common. The participating preferred stock has a set cumulative dividend of \$2.60 per share per annum.

In addition, however, directors may pay any additional dividends they care to on the preferred, without regard to what rate the common receives; but in any case, the participating preferred must receive at least as much in any year, over its regular cumulative dividend, as does the common, after both classes have received \$2.60 per share in that year.

In other words, the preferred stock is preferred, and also participates at least equally in any extra dividends, and therefore earnings, which may accrue. As a matter of fact, the dividend rate on this preferred stock was \$4 per share at the beginning of 1930, or well above the basic and cumulative rate of \$2.60 per share.

Preferred stocks are callable, or redeemable, in much the same manner as are bonds. Such call prices are almost always noted in the stock provisions when the issue is first put out. The call price is usually well above the par value, or, in the case of no-par preferred stocks, well above the price at which the preferred issue is sold to the public.

Preferred vs. Common Stock

Through our previous comparisons of common stock with bonds and with preferred stock we already have a fairly good idea of what place common stock holds in the general picture of corporate capitalization and financing. Common stock occupies the opposite extreme of the picture from bonds. Just as the bondholder runs the small risk and gets the limited but certain returns of the lender, so the common stockholder runs the large risk and gets the uncertain but also unlimited reward of the part owner of the business. Common stock is generally the junior issue of any corporate capitalization. It is subsidiary to almost all other claims, gets only what may be left after the other claims have been satisfied, but gets *all* of that.

Common stock may be subdivided according to dividends

paid, if need be, though such demarcations are not usually made. Generally there is only one class of common stock, all on the same dividend basis. When there is more than one class they are generally classified according to seniority. Class A common stock, for instance, has seniority in dividends and assets over Class B common, and the latter has seniority over Class C common. Very few corporations have more than two or three classes of either common or preferred stocks. In multiple classes of both common and preferred stocks, the individual classes are generally on varying dividend rates.

There has been a tendency in the past few years for corporations to raise most of their capital through issuance of common stock. The public, with the stories fresh in mind of huge profits in common stocks, expressed a stronger appetite for such junior issues than for bonds or preferred stocks. Many corporations, therefore, have dropped the preferred stock from their capitalization entirely and many of these have substituted two classes of common stock for one class of preferred and one of common. In such case the Class A common stock is similar to the old preferred stock, often carrying a cumulative dividend, while the Class B common stock is essentially the same as the old common stock.

Class A Common vs. Preferred Stock

In the case of varying classes of common stocks, the same redemption and profit-sharing provisions are often found in connection with the Class A stock which we have previously noted in connection with the preferred stocks and bonds. Another modern expedient has been coupling any two of the various security types of capitalization and offering preferred stock with a bonus of common, or offering preferred and common stocks in "units" of perhaps one share of preferred and one or two shares of common stock, such units being offered in combination at one certain set price. Just as in the case of profit-sharing bonds, however, this practice is found perhaps most often in the financing of new and undeveloped companies, where prospects are speculative

and some "bargain feature" must be offered to tempt the public into buying.

Besides preferred and common stocks there are rather unusual issues of founders' stocks and equally unusual issues of management stocks. These two types are very similar, since they are issued generally at the beginning of a stock promotion for some new company and are given to the founders or managers in payment for their services of organization, in lieu of cash. These common stocks are generally even lower, or junior, in their claims, than the regular common stock. They also have very little apparent or current value, so far as dividend rights are concerned, when first issued at the commencement of the corporation's career, but their provisions are generally so arranged that if the corporation makes good in the future (presumably through the efforts of these founders or managers) the stocks will have a very real and often very high value. Quite often founders' shares or management stock issues are convertible into the regular common stock when net profits have reached a certain figure, or share in dividends with the regular common stock in similar circumstances.

Management Options on Stock

Apropos of methods for conserving a company's cash resources and still giving the early management an incentive to achieve high profits, we might mention the practice of giving management an option on certain blocks of authorized but unissued stock. A corporation's capitalization is authorized at a total number of shares of each type of security by the stockholders, and the directors are then authorized, from time to time, to issue such securities for various purposes, often at their own discretion. Authorized capitalization, therefore, is almost always larger than actual, or outstanding, capitalization. Only the amount of shares or value of securities actually issued or outstanding, of course, constitutes the true capital liability of the corporation and is used for balance sheet purposes.

Directors sometimes use a portion of such authorized but un-

issued common stock to stimulate their managers to greater effort. The managers are given an option to purchase blocks of such stock at any time within several years and at prices above the current market values of such stock. If the managers are successful in increasing the corporation's profits, the market value of the company's stock advances to a point where their options may become extremely valuable and so serve as an additional cash reward for their efforts. Similar arrangements are often made with financing houses as part payment for underwriting.

In the immediately preceding paragraphs we have touched upon a principle of security issue which makes provisions that, while not currently valuable, may some day become so, and thus add an additional element of speculative attraction to the security involved beyond its actual present worth. We have previously spoken of profit-sharing bonds and stocks as the answer to the public demand for good security but also for some share in large profits, and for a security "with the scarlet tinge of speculation" in it. Such public demand has been met in a much more usual and large-scale way through the issuance of senior securities with additional rights to junior securities, which rights become valuable as the latter advance.

Convertible Bonds

In the bond category this added speculative attraction takes the form either of convertible bonds or bonds with warrants attached. We must be certain, by this time, that bonds do not represent ownership and cannot therefore profit from the corporation's surplus prosperity as can stocks. But somewhat the same speculative possibilities are given to a bond by providing that the bond may be converted into such junior stock. Such is called a convertible bond. Convertible bonds are usually convertible into common stock. The detailed provisions of such conversion features are many and various but they all partake of the same principle. There is usually a conversion time limit, such as that the privilege of conversion shall be in force only from a couple of years after issue of the bond until a certain date,

perhaps 10 years after its issue. Many bonds are convertible at any time from issue until maturity, however.

Naturally, the speculative attraction of the conversion proviso depends upon the basis of conversion in price. The price at which such conversion would be profitable is generally well above the current market value for the stock into which the bond may be converted. Sometimes an actual price is named, as in the case of Missouri Pacific Railroad Company convertible 5½'s of 1949. These bonds are convertible into common stock of the railroad at a price of 100, the conversion privilege running from May 1, 1931, until maturity or redemption. This means that during that period every \$100 of such convertible bonds may be converted into one share of common stock. For every \$1,000 bond of this series, therefore, the holder could turn in his bond and receive in return 10 shares of common stock.

It is apparent, therefore, that before this conversion privilege became valuable Missouri Pacific common stock would have to sell at over \$100 per share. In practice, however, the conversion feature adds to the market value of a convertible bond before the stock actually reaches the conversion price, due to anticipation of buyers that the stock will reach that price and exceed it, and the resultant demand for the bonds even before the stock has actually reached the conversion level.

An Example: Missouri Pacific Convertibles

In the case of Missouri Pacific convertible 5½'s of 1949, for instance, the bonds sold at about 125 in the summer of 1929, when the stock was selling for only about 95. The stock was still below the level that would make conversion of the bonds into stock actually valuable in cash, but the market value for the bonds had already begun to anticipate, or discount, the probability that the stock would at some future date be selling well above 100 and so make the conversion profitable. The value of such conversion privilege in a bond is illustrated in this particular issue, since other five per cent. bonds of Missouri Pacific, which are not convertible, were selling well below par at the same time.

American Tel. & Tel. Convertibles

Quite frequently, the price at which a bond is convertible into common stock is made variable with the passage of time. Thus in the case of the recent issue of American Telephone & Telegraph Company convertible 4½'s of 1939, the bonds are convertible into common stock at a price (for the stock) of 180 in 1930, at 190 in 1931 and 1932, and at 200 per share in the next five years. The conversion privilege extends, therefore, only from January 1, 1930, until December 31, 1937. This means that for every \$100 of such bonds, together with \$80 in cash, the holder may receive one share of common stock during 1930. Or for every \$180 of bonds he may receive one share of stock.

Conversion at a Scale Price

When the conversion price advances to \$200 per share in 1933, then the holder will have to give up \$200 worth of his bonds, or \$100 of bonds and \$100 in cash, for every share of common stock. Since the bonds will probably then be selling above par, the holder would prefer to exchange \$100 of his bonds and an additional cash payment of \$100, rather than turn in \$200 face value of the bonds. Even in 1929 the bonds sold at over \$200, so that for every \$100 of face value the bond itself was selling for \$200 in the open market. The holder would prefer to turn in as little face value of the bond as possible, therefore, making up the difference in cash.

Conversion into Stock

Another variation of the conversion price provision is to provide that each \$1,000 of bonds may be converted into a certain number of shares of stock. If into five shares of stock, then the conversion price is, of course, \$200. If into 20 shares of stock then the conversion price is \$50, etc. Each \$1,000 of Alleghany Corporation convertible 5's of 1949 is convertible into seven shares of preferred stock without warrants and 10 shares of common stock.

The sliding scale is also used in this category. International Cement Corporation convertible 5's of 1948, for instance, are convertible into the common stock on a basis of 11 shares of common for each \$1,000 of bonds up to May 1, 1933. In the next five years each \$1,000 bond is exchangeable for only 10 shares of common, the next five years into nine shares, and the last five years of the conversion privilege each \$1,000 bond gets only eight shares of common. This amounts, of course, to gradual raising of the conversion price, since it would take a greater face amount of the bonds to convert into one common share in 1948 than at the present time.

Warrant Bonds

The preceding examples are those of convertible bonds. The other type of bonds with speculative rights as their features are bonds with warrants attached. In this case, each such bond carries a detachable warrant entitling the holder to purchase a certain number of shares of common or preferred stock in the issuing corporation at a certain price. As usual, this price is generally well above current levels for such stocks but is also low enough to indicate the possibility that the warrants, with their right to buy the stocks, may be valuable at some future date. In the case of such bonds, the bond itself is not exchanged or given up, but merely the warrant is detached and used as the "added attraction," while the bond may be retained without its warrant just as any other bond originally issued without such speculative features.

In almost all instances such warrants are detachable. A differentiation in price must therefore be made between bonds with warrants attached and bonds whose warrants have already been detached and used. In quoting prices for such bonds, therefore, the quotations will be marked "with warrants," or "without warrants," or "ex-warrants." In some rare cases the warrants are not detachable from the bond, and if the holder wishes to use the warrants he must return the entire bond to the corporation, which

REYNOLTON BRAND

VOID AFTER MAY 1, 1937

DATED AS OF MAY 2, 1927.

1011

VICE PRESIDENT

PLATE 61. SAMPLE WARRANT FROM BOND

Stock purchase warrant, for purchase of Remington Rand common stock, pursuant to terms of the bond of Remington Rand, Inc., shown in Plate 57. This stock purchase warrant has been detached from the bond certificate. When sold with the warrant attached, the price of the bond in Plate 57 would be quoted "with warrants." If the bond were sold after this warrant had been detached, the price quoted would be "without warrants."

will detach the warrants or issue a new bond without warrants attached.

In other isolated cases the warrants are not transferable, which amounts to about the same thing as making them not detachable. In almost all cases provisions are made for adjustment of the conversion price downward in case the corporation should pay extra dividends, in cash or stock, rights or other extraordinary benefits on the stocks into which the bonds are convertible, thus reducing the market price of such stocks. Provisions are also made that sufficient notice must be given holders of convertible or warrant bonds in case of redemption prior to maturity, generally a notice of 60 to 90 days, so that exercise of the conversion or warrant privilege may be accomplished by holders before the date for redemption of their bonds, in case such exercise would be valuable.

Convertible Preferred Stocks

In the preferred stock classification the added speculative attractions are generally quite similar to those which we have discussed in connection with bonds. The main differences are that there are usually no time limits for exercise of the conversion or warrant privilege for preferred stocks and that the sliding scale of conversion prices is seldom used. Naturally, a preferred stock carries the right to only common stock, and in no case to a bond, such rights proceeding always down the scale from senior to junior issues and never vice versa. In preferred stocks, as in bonds, there appear to be more issues which are directly convertible into the junior stocks, than issues which carry warrants for purchase.

In the case of convertible preferred stocks the actual price at which stock may be converted gives way almost entirely to a ratio of share exchange. Bonds have a very definite face value and usually stay pretty close to it, so that setting a conversion price on bonds into stock is fairly simple. In the case of preferred stocks, however, price fluctuations are more rapid, and they often sell far from their par value, even granted that they have any

par value, so the most practical procedure is to set a share for share ratio of exchange.

The no-par \$4 cumulative preferred stock of Hershey Chocolate Corporation, for instance, is convertible share for share into the common stock at any time. The \$100 par, seven per cent. cumulative convertible preferred stock of United States Distributing Corporation, on the other hand, is convertible into the common stock on a basis of four for one. In other words, every share of the preferred stock may be converted at any time into four shares of the common.

Preferred Stock with Warrants

Although preferred stocks with warrants attached are not so common as convertible preferred stocks, there are plenty of them extant. And in such cases, of course, the share for share ratio cannot be used since the actual shares are not exchanged. Only the warrants are detached and used to purchase common stock at advantageous prices. Each share, however, carries one or more warrants and in some instances one warrant entitles the holder to purchase more than one share of common stock. In most cases, however, each warrant is for purchase of only one share of common. Here, however, we go back to the conversion price provision noted in convertible and warrant bonds. Since the warrants of the preferred stock are not exchangeable, but merely allow the holder to purchase common stock, there must be a price set for such purchase.

Loew's Preferred with Warrants

An example is found in the \$100 par value $6\frac{1}{2}$ per cent. cumulative convertible preferred stock, with warrants attached, of Loew's Incorporated. This stock has warrants attached which entitled the purchaser to buy at any time prior to April 1, 1931, a half share of Loew's common stock at an original price of 80. Here we find an adjustment, however, as was previously noted in bonds with rights, due to payment of a stock dividend on the com-

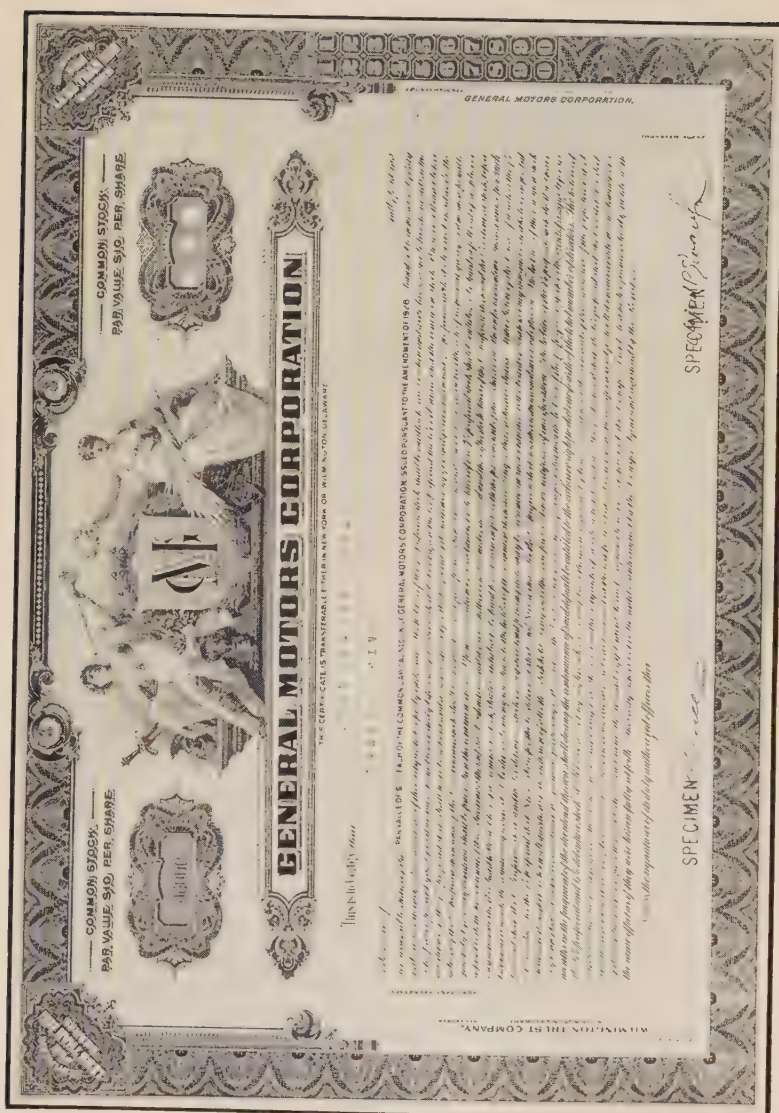
mon stock into which the preferred issue is convertible. In 1928 Loew's paid a 25 per cent. stock dividend on the common issue, which reduced the price of the stock by one-fourth in market value. It would be manifestly unfair to the preferred holders, therefore, to leave the common purchase price of the preferred warrants at their previous high figure. Such price has therefore been reduced by the amount of the stock dividend, by giving $1\frac{1}{4}$ shares of the common instead of one share, on purchase at the original price by warrants. The reduction was one-fourth of the previous purchase price and the new warrant purchase price amounts, therefore, to only about \$60 per share. Each share of this preferred stock carries a warrant, therefore, to purchase a half share of common stock at around 60. The original warrants still read \$80 but the company stands ready to make this adjustment whenever the warrants are presented.

Notice of Redemption

In the case of preferred stocks, convertible or with warrants attached, the same provisions of notice before call for redemption apply as in the case of bonds. The issuing company contracts to give generally a notice of 60 to 90 days if it decides to call its preferred stocks of this nature, so that the holder may have ample time and opportunity to exercise his conversion or warrant purchase privileges before he must surrender his stock. If the stock is convertible and he decides to convert, then, of course, he gets the common stock in return for his certificate instead of cash. In the case of a preferred stock with warrants attached which has been called, the holder may exercise his warrant privilege and still have the original stock, without warrants, to turn in for redemption when it is called. Preferred stocks are quoted with or without warrants just as are bonds.

The Common Stock

But the study of bonds and preferred stocks is only the introduction, as it were, to the much more important consideration of



COMMON STOCK —
PAR VALUE \$10 PER SHARE

COMMON STOCK —
PAR VALUE \$10 PER SHARE



GENERAL MOTORS CORPORATION

INCORPORATED IN THE STATE OF MICHIGAN

THIS CERTIFICATE

DOES HEREBY CERTIFY THAT THE UNDERSIGNED IS THE REGISTERED OWNER OF THE COMMON STOCK OF THE GENERAL MOTORS CORPORATION, AS SHOWN ON THE RECORDS OF THE CORPORATION, TO THE AMOUNT OF ONE (1) SHARE, PAR VALUE \$10 PER SHARE, AS SHOWN ON THE RECORDS OF THE CORPORATION, AND THAT THE SAME IS FULLY PAID FOR.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the Corporation, this 1st day of January, 1914.

ATTEST:

SECRETARY

SPECIMEN

SPECIMEN

PLATE 63. SAMPLE COMMON STOCK CERTIFICATE
An odd-lot certificate for General Motors \$10 par common stock.

the common stock. We have seen the rights and characteristics of these "senior securities" and have observed that generally their potential yields and profits are limited, whereas the common stock is in position to receive all the remaining financial returns not taken up by the more or less fixed charges on the senior issues.

Sitting at the lower end of the security table, as it were, the common stock is nevertheless in position to gobble up the entire surplus of profits which are passed down to it from the head of the table, past the limited appetites and capacities of the older children. If the provender is small, the older children are quite certain of getting at least their regular share and little Willie common stock goes hungry. But when the harvest has been golden and the board is heaped with profits, the older children still get only their fixed portions and little Willie common stock now reaps the reward of his patience. Feast or famine. But all because the common stock takes the risk, as the true owner of the business.

Just as the deed to a piece of individual property is the negotiable and transferable evidence of its ownership, so the common stock certificate is the insignia of part ownership of a corporation. The common stock certificate is issued by the corporation in return for the purchase price or the investment which the owner of the certificate makes in the corporation. It is evidence of such investment as well as evidence of the owner's part ownership in the corporation, including all of its assets and liabilities.

The Stock Certificate

Since the corporate form of capitalization presumes the joint ownership of a large number of individuals, stock certificates are made out in units of such total ownership which we have long since known are called shares. Stock certificates are issued in amounts of anywhere from fractions of a share to thousands of shares and certify that a certain party is owner of a certain amount of some definite type of stock in the particular corporation issuing the stock.

The stock certificate carries the name of the owner, the number of shares owned and the various provisions involved in the particular type of stock represented. It is signed by officers of the corporation, is dated and carries usually the company's seal on its face. The background of the certificate may be in different colors, according to the various types of stock which the corporation has outstanding and also according to whether the certificate is for 100 shares or over, or for an "odd lot," or for fractions of a share in the form of scrip.

Just as the various recorders' offices keep the records of property owners, as evidenced in the deeds which the offices issue, so the corporation must have an office or agent to record the names of the owners of its various stocks, as evidenced by the stock certificates which it issues. In practice it is customary for the corporation to have two such agencies, known as the transfer agent and the registrar of stock. The New York Stock Exchange requires that all corporations whose stocks are listed must maintain two such offices in Manhattan. Instead of maintaining their own offices most corporations utilize the convenience of appointing banks and trust companies, or banking houses, as their agents of transfer as well as of registration, which banking houses make a practice of giving such service. The transfer agent and the registrar must be different offices and agents, however, since their double designation is in the form of a check, one upon the other, to minimize the danger of fraud or over-issuance of corporation securities.

The transfer agent and the registrar, being reciprocating checks, perform similar functions. The transfer agent actually transfers stock ownership, cancels old stock received and issues the new stock in the names of the new owners, keeping its records of ownership, thereby, as nearly up-to-date and correct as the owners of the stock will make possible by sending in their certificates for transfer. The registrar merely checks up on the transfer agent to see that there is no over-issue of stock. The transfer agent's transfer or issuance of stock is not valid and not "good delivery" unless it is countersigned, and thus approved, by the corporation's registrar.

The Transfer Form

On the reverse side of each stock certificate (or sometimes on separate or attached instruments) is the transfer form. In point of exact law the stock certificate is not transferable, but in practice legal recognition is given this transfer form which, when properly filled out by the recorded and registered owner, makes the certificate payable to the bearer, and thus makes it perfectly negotiable and "good delivery" from seller to purchaser.

The transfer form is the medium of a power of attorney assignment to a named or usually unnamed assignee of the full value and representation of the certificate assigned. When a stock certificate is originally issued it carries on its face, of course, the name of the true owner as recorded and registered. The stock certificate is then non-transferable until the transfer form, assignment or power of attorney on the reverse side is properly filled out by the individual owner whose name appears on the face of the certificate. Before the stock is delivered to the broker for delivery or sale, or before it is returned for transfer, this transfer form must be made out.

There are usually blanks for the name of the person or firm to whom the assignment is made, for the date, for the signature of the owner and for the signature of a witness. If all of these blanks are filled the certificate is "endorsed in full," but it is seldom that the endorser, or owner of the stock, knows who the next owner is going to be. The blank for the assignee is therefore generally left open, and the certificate is said to have been endorsed "in blank." Most certificates are endorsed in blank and, in point of practice, the owner's signature on the transfer clause is really all that is required to make the certificate acceptable. The date and witness may appear, and really should appear, but this is not necessary and it is simpler, of course, merely to sign one's name and let it go at that. If there is any danger of the certificate falling into foreign hands, however, and the name of the assignee is known, then the precaution should be taken to fill in this space also. When a stock certificate is delivered to a broker for the latter's sale to some unknown

party in the open market, the assignee may be filled in as the name of the brokerage house to whom the certificate is delivered for sale.

Endorsing in Blank

The greatest care must be taken to have the signature of the owner on the transfer assignment correspond exactly, and in every

For Value received, _____ hereby sell, assign, and transfer, unto

 _____ *Shares*
of the Capital Stock represented by the within Certificate, and do
hereby irrevocably constitute and appoint _____
 _____ *Attorney to*
transfer the said stock on the books of the within named Corporation
with full power of substitution, in the premises.

Dated, _____ 19____

John Smith Doe

In Presence of *Richard Roe*

NOTE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME, AS WRITTEN UPON THE FACE OF THE CERTIFICATE. IN NO PARTICULAR WITHOUT ALTERATION OR ENLARGEMENT OF ANY CHARACTER WHATSOEVER.

PLATE 64. REVERSE SIDE OF A COMMON STOCK CERTIFICATE

A portion of the back of the certificate shown in Plate 63, showing the certificate "endorsed in blank."

detail and letter, with the owner's name as written or printed on the face or opposite side of the certificate, whether the latter name has been spelled correctly or not. If there is a difference of so much as a letter or a period between the endorsement and the

owner's name on the face of the certificate the assignment is not legal and the stock will not be accepted as "good delivery" by the broker.

The above method of endorsing in blank is used when delivering the certificate for sale or in any delivery where ownership passes. It is also used in returning the certificate to the transfer agent for division into smaller certificate amounts, for redemption, for exchange of shares or for any purpose where the old certificate will be cancelled by the transfer agent and new ones issued or redemption effected.

If any change in the certificate is to be made it is always returned to the transfer agent, endorsed in blank. A certificate for 100 shares may be reissued to different or the same owners in various certificates of smaller denominations, always totalling the same number of shares, of course, as the certificate surrendered. Likewise, certificates for a smaller number of shares may be sent in and exchanged for one new certificate of the total number of shares represented by the smaller certificates surrendered. All such transfers are carried out at the order of the owner of the stock, and instructions, given in a separate note or letter, must be signed just as carefully, with the name exactly as printed on the face of the certificate and written on the endorsement.

Taking Up Rights to Additional Stock

When rights to subscribe to additional stock are given they are sent out by the transfer agent in the form of certificates with all the provisions printed upon them. Whether the rights are sold or sent back to the transfer agent with a check for the new stock, the subscription certificates must be endorsed just as are the actual stock certificates. For example, let us go back to the case of the owner of, say, one share of United States Steel who had the right to subscribe to one-seventh of one new share at \$140 per share. Practically, if he wished to exercise his right he would buy more rights to make up his right to purchase a full share. Let us say that he does buy six more rights in the open market. He now has these six rights, which are already endorsed in blank

by the original owners, to whom they were made out and who sold them in the open market. He also has his own right, which he may endorse in blank, and his own one original share which he may also endorse in blank, if he wants one new certificate for his two shares.

He then makes out his check to the order of the United States Steel Corporation for \$140, and sends the original shares of Steel, the seven rights and his check to the transfer agent of the company with the request that they issue to him a new certificate for two shares of United States Steel.

Since stock or right certificates are perfectly negotiable as soon as they are endorsed in blank by their owner, the precaution against loss is usually taken to register such certificates when they are returned to the transfer agent for any purpose. It is also the practice of transfer agents to register letters with stock enclosed to their new owners. A receipt form is also enclosed, and it is important for the records of the transfer company that such receipts be signed promptly and returned to the transfer agent. The transfer agent usually takes anywhere from only a few days to several weeks to complete the transfer of stock sent to him. Many transfer agents make a practice of acknowledging receipt of certificates for transfer, but if the letter in which the certificates were sent is registered and a return receipt requested such constitutes a fairly complete check on the receipt of such securities.

“Good Delivery”

We have spoken often in the past about a stock certificate as “good delivery.”¹ The term is used to indicate the legal negotiability of a stock certificate. We have seen that in stock exchange trading, or as a result of it, security certificates are constantly passing from hand to hand, from broker to broker. If such certificates are not duly endorsed in blank, with signatures guaranteed by the broker or banker, and if they are not countersigned by the proper corporation officers and the transfer agent,

¹ See Chapter V, p. 81.

and approved by the registrar, then they are not "good delivery," for they do not represent true ownership to the house or individual to whom they have been sold. The term is used commonly in brokerage house circles, but it is especially important in clearing house procedure, of course, since it is there that exchange of stock for cash is actually made.

Temporary Stock Certificates

When a new security issue is put out by a corporation it often happens that, for various reasons, the corporation cannot or does not choose to issue the regular or permanent stock certificates at once. Rather than hold up the issuance of the security or the process of exchange of one security for another, therefore, "temporary certificates" will be issued. There is little difference between the temporary and permanent certificate except what would be assumed.

The temporary certificate is not so formal and probably will not carry the full provisions of the new stock issue. The temporary issue is transferred and registered, however, just as the permanent issue would be. The temporary issue is also listed on the stock exchange for regular trading, and so far as such trading, value and all practical purposes are concerned, the temporary certificate is equal to the permanent one. When the permanent certificates are finally ready the new exchange is made, the stock exchange listing committee, which supervises all listings of securities on its particular exchange, is notified, and the new permanent certificates are substituted for the old temporary ones in official and regular trading. After this substitution the temporary certificates are no longer "good delivery" for that particular stock, unless they have been made so by special decree of the listing committee.

The Trust Certificate

Another form of stock certificate is the "trust certificate." Sometimes corporate method, especially corporate voting "poli-

tics," makes it expedient for an individual or a group, almost always connected with the corporation's management, to have at all times full control of a certain block of the company's stock, almost always for voting purposes. In such case the group holding the stock will finance its holdings by the issuance of trust certificates, or "voting trust certificates." Trust certificates are issued to the same number of shares as are held in the trust agreement.

The voting trust agreement is a legal contract, usually supervised by some bank or trust company as agent, executor and trustee, which defines the rights of both the trust group and the holders of the trust certificates. The only rights which the trust officers generally retain for themselves are those which pertain to voting the stock in the trust agreement. Owners of the trust certificates have all other rights and privileges inherent in the actual shares, including the right to receive all regular and extra disbursements on the stock constituting security for their trust certificates.

For Voting Control

A recent instance to illustrate the working of such a principle is found in the voting trust agreement of the Ford Motor Car Company of Canada, Ltd. This company formerly had only 100,000 shares of \$100 par value common stock as its sole authorized capitalization, of which only 70,000 shares were actually outstanding. In the summer of 1929 this old stock was split up on a basis of 19 shares of Class A non-voting common stock and one share of Class B voting stock, for each share of the old stock outstanding. This meant that after the exchange there would be 1,900,000 shares of authorized Class A and 100,000 shares of authorized Class B stock. All of the authorized Class A stock was issued and outstanding, including the amount of old stock previously in the treasury. The 30,000 shares of new Class B stock, resulting from the 30,000 shares of old stock previously held in the treasury, were not issued directly to the public.

An Example in Ford of Canada

The reason was one of control. The Class A issue is non-voting, and sole voting, or control, power is vested in the Class B common stock. Mr. Henry Ford and his family are said to have held approximately 30 per cent. of the old stock previously outstanding. They would therefore hold control of 30 per cent. of the new Class B voting stock, originally amounting to only 70,000 shares, or a total of around 23,000 shares for voting purposes.

In March, 1929, the 30,000 additional Class B voting shares, which had previously been unissued and in the treasury, were placed in a voting trust agreement against which 30,000 shares of voting trust certificates have been issued at \$25 per share. The voting trust consists of three members, one appointed by Mr. Ford, one by holders of the voting trust certificates, and the third by the first two. It seems quite certain, therefore, that Mr. Ford can control this voting trust, which controls the voting of the other 30,000 shares of Class B stock. Thus Mr. Ford has added 30,000 shares more of voting stock control to his previous control of 23,000 shares. The total of 53,000 shares gives him 53 per cent. of the total amount of 100,000 shares of the Class B voting stock now outstanding, and control of his corporation. Thus, through organization of a voting trust agreement, issuing voting trust certificates against the actual stock as security, Mr. Ford appears to have raised his control from only about 30 per cent. to around 50 per cent. of the total voting stock of his company.

Stock in Escrow

In very rare cases an occasion arises wherein a certain block of stock must be impounded or attached by parties either in the company or outside of it. The stock is then said to be "in escrow" and is administered in trust for the company or its owners by the trustee in escrow. The agreement under which stock is placed in escrow is limited to a certain date of expiration, just

as most voting trust agreements also have a time limit definitely named in such agreement.

Voting Privileges

The voting privileges inherent in the provisions of various stock issues are not regarded very seriously by the average small investor, but they have a great importance from a theoretical point of view. The large holder is more likely to be interested in whether or not his stock allows him a vote in the management of the corporation.

Theoretically, since stock, especially common stock, implies part ownership in a corporation, every share of such stock should have some share in the voting on matters of policy, election of directors, etc. Actual practice differs widely in this regard, however. There has been a regrettable growth in the issuance of non-voting stock in recent years, and the financial world is just beginning to wake up to the injustice of such a tendency, with the result that there is growing propaganda against the issuance of any stock which does not have voting privileges. The feeling is just and logical, for on a basis of theory, if from no other standpoint, every type of common stock, at least, should have voting privileges.

In the case of preferred stocks the voting privilege is not so necessary, since the risk attached to the investment is not so great. Most concerns provide that their preferred issues shall have some form of voting power, often qualified to the effect that the preferred issue shall have no voting power unless the stock has not received dividends for a certain length of time, in which case the preferred stockholders shall have the right to elect a certain stated number of the total board of directors or otherwise share in directing the policies of the company until dividends have been restored on the preferred stock.

Most of the better concerns, and particularly the older ones, give all types of their common stocks voting power, each share of stock having one vote at the annual stockholders' meeting or any special stockholders' meetings. The chief privilege of stock-

holders' voting is that they may select the board of directors in whose hands is the actual supervision and executive management of their corporation's affairs and general policies. Needless to say, a voting stock, other things being equal, is more attractive than a non-voting stock, whether such fact seems important at the time of purchase or not.

Importance of Voting Privileges

Occasionally, and especially in recent years, with mergers, combinations, and various struggles for control, the voting privilege has assumed a greater measure of importance. Early in 1929 the stock of Buffalo, Niagara & Eastern Power Corporation was eagerly sought, in order to bring about its consolidation into the larger holding company now called Niagara Hudson Power Corporation. Both the Class A and the common stock of this small concern had absolutely equal rights in all respects, except that the Class A stock had voting power while the common stock did not. The result was that for several months, or almost until the merger was assured, the Class A voting stock of Buffalo, Niagara & Eastern sold some 20 points and more above the common, or non-voting, stock.

The holder of voting common stock has a perfectly free right to attend the annual and other special stockholders' meetings and "vote his own stock." He also has in most meetings the right to ask questions of the officers presiding or present, and to make suggestions for or criticism of his company's policy as he sees fit, though there is no guarantee, of course, that his criticism will get him very far unless he has enough stock or controls enough votes to make him a considerable power in election of the board of directors. In various instances, where minority stockholding groups have been dissatisfied with management, very interesting, if not exciting, meetings have taken place.

The Voting Proxy

Usually, the individual stockholder is not sufficiently interested, or is not conveniently enough located to the place of meet-

ing, to attend the stockholders' meeting in person. He may convey his voting power, however, to anyone he deems fit, through a particular type of power of attorney used only in such voting cases, called the proxy. By this instrument, the holder of voting stock delegates someone else as his agent with full power to act for him in voting at such stockholders' meetings. In order that all voting stockholders may be represented, or shall have the

017-1939-225

UNITED STATES STEEL CORPORATION

PROXY FOR ANNUAL MEETING OF APRIL 16, 1928

KNOW ALL MEN BY THESE PRESENTS: That the undersigned Stockholder of the United States Steel Corporation do hereby constitute and appoint GEORGE F. BAKER, J. PIERCE MORGAN, PERCIVAL ROBERTS, JR., MYRON C. TAYLOR and ROBERT WINSOR, and each of them, sole and lawful attorney or attorneys, agent or agents, and proxy or proxies of the undersigned, with full substitution for and in the name, place and stead of the undersigned to vote upon all Common Stock and Preferred Stock, or either held or owned by the undersigned or standing in his name, at the Annual Meeting of the Stockholders of the United States Steel Corporation at Hoboken, New Jersey, on Monday, the 16th day of April 1928, and at any and all adjournments thereof:

1. For the approval and ratification of the various purchases, contracts, contributions, compensations, acts, proceedings, elections and appointments by the Board of Directors or by the Finance Committee since the Annual Meeting of Stockholders of the Corporation on April 18, 1927, and all matters referred to in the Annual Report to Stockholders for the fiscal year ending December 31, 1927.
2. To elect Directors pursuant to the by-laws.
3. To elect a committee of three stockholders to administer the Corporation Profit Sharing Plan adopted at the Annual Meeting, April 18, 1921.
4. For the election of independent auditors to audit the books and accounts of the Corporation at the close of the current fiscal year.
5. Upon any and all other business that may properly come before the meeting.

All as fully and according to the number of votes the undersigned would be entitled to cast if personally present, hereby revoking any proxy or proxies heretofore given to vote upon such stock, and ratifying and confirming all that said attorneys, agents and proxies may do by virtue hereof. A majority of all or of any of said attorneys, agents and proxies who shall be present and shall act at the meeting (or if only one shall be present and act, then that one) shall have, and may exercise, all the powers of all of said attorneys, agents and proxies hereunder.

WITNESS my hand this 4th day of April 1928.

Specimen

John Doe

PLATE 66. SAMPLE VOTING PROXY

Conveying the voting power of a United States Steel Corporation stockholder to delegated agents, for an annual stockholders' meeting.

opportunity of representation at the meeting, the directors of a corporation usually mail out such proxies several weeks before the date of the meeting. It is usually suggested that the stockholder delegate as his voting agents a certain proxy voting committee which the directors have decided upon, and their names are usually filled in on the proxy.

Under ordinary conditions there is no struggle for appointment of agents and it is the stockholder's privilege, as well as his duty, to assist in the complete and orderly conduct of his company's stockholders' meeting by signing the proxy sent him and returning it promptly to the corporation executives. Failure to send in proxies is similar to failure to vote at any political election. It brands the individual as somewhat of a slacker and

as lacking in true interest in the welfare of his corporation, or of his community. "There are plenty of others without me" and "my vote wouldn't make any difference" are the stock excuses in both cases, but the argument also holds in both cases, that if everyone felt that way things would come to no good end. From a standpoint of his duty as a stockholder, therefore, if from no other motive, the stockholder should always sign and return his proxy promptly, if he cannot attend his company's meeting in person.

Struggle for Control

In rare, but by no means unheard of, instances, two factions will engage in a bitter war over conduct of the business and the company's policy. Both factions will try their best, of course, to get their own candidates in as directors to carry out their own ideas. Then ensues a struggle for control and a battle of proxies. The stockholder is besieged with requests that his proxy be made out to this group or the other group. Such requests are nearly always accompanied by the arguments of the opposing factions, and the only fair thing for the stockholder to do is to wait until he has digested the entire situation, examined the various arguments and decided which faction is right. That faction should then be supported in its efforts by the voting power or proxy of the stockholder. He may hold only a few shares of stock but his vote is none the less to be desired.

In ordinary cases all that is necessary in making out a proxy is to use the form sent by the company, date it, sign one's name, perhaps have a witness, and mail it back to the corporation which generally supplies a self-addressed, stamped return envelope for such purpose. Proxies are mailed, of course, to the holders of record on the company's books and only those holders are entitled to vote. So long as the certificate of a voting stock stands in a certain name on the corporation's record books that person is the only one entitled to vote that particular block of stock, even though he may have sold the stock before the meeting is held.

Registered Voters

We have seen ¹ that dividends, in such a case, are passed on to new owners but the right to vote is not and is vested only in the name of the owner as it appears on the voting records of the corporation.

As has been said, this right of the stockholder to vote and to have a share in the active directing of his company's policies is not valued as highly as it should be by the majority of stockholders. Theoretically, it is just as important for the part owner of a producing property or corporation to help manage his business as for the sole owner of a private enterprise to exercise personal control over the affairs of his venture. Far from being a boresome duty, it should be the stockholder's privilege to vote his share of ownership in the management of his corporation.

¹ See Chapter XII, p. 269.

CHAPTER XV

DIVIDENDS AND RIGHTS

Dividends and Interest

We have previously seen that coupons are used to pay corporation interest on its bonds, or loans, at a specific rate.¹ Since stocks do not represent loans to a corporation, but represent rather a part ownership in the company, the returns which such stocks receive may not rightfully be called interest. To a larger degree they represent partial profits of the stockholder's business enterprise and they are commonly called dividends.

If the payment and the rate of payment for dividends on stocks were as definite and certain as they are in the case of interest on bonds, then it would be quite practicable for such dividends on stock to be paid through the coupon method of collection as in the case of bonds. Because stocks represent ownership, however, the dividends which they yield depend upon the company's profits and state of prosperity.

Books of Record

Since the coupon method of payment to bearer cannot be used in the case of stocks, the corporation must have a record of the rightful owner of every one of its stock certificates, so that when, as, and if dividends are declared on such stock, the corporation may pay such dividends directly to the true owner of the stock. It is largely for this reason that all stock certificates are made out to specific names and not to the bearer. We have seen that the stock certificate changes hands so often in special instances, that it may actually have gone through several different ownerships without the issuing corporation being aware of such ownership change. In such case we have also seen that naturally the

¹ See Chapter XIV, p. 310.

dividend on such stock certificate would be paid to whoever owned it according to the latest records of the corporation. That individual would thereupon have to pass such dividend on to whoever had purchased it from him, and so on until the dividend found its way to its rightful owner.¹

Just as the interest on a coupon bond is paid in cash by the issuing corporation, so most dividends on stock are also paid in cash by the issuing company. In the case of preferred stocks, where the dividend rate is usually fairly stable and limited, this is the rule with little exception. In the case of common stocks, however, dividends are not always paid in cash. Since the common stock represents the most definite measure of part ownership and participates most fully in the profits of the corporation, its dividends are the most varied of any form of corporation capitalization. When the profits and excess equities which accrue to a common stock grow too large to be conveniently paid in cash, such dividends may take the form of stock dividends, in which case the owner of stock is given more stock in lieu of a cash dividend, or may take the form of rights to subscribe to valuable stock issues, either the same or some other stock, at prices below their market value, thus approximating a cash dividend, though resulting in no direct outlay of cash on the part of the corporation issuing such rights.

Common Fallacy of Dividends

There is perhaps no more flagrant or more widespread misunderstanding regarding stock market affairs than that which concerns itself with dividends of one sort or another on common stocks. When the common stockholder receives a dividend of any sort he generally feels that he is "getting something," that his net worth is increased by the value of that dividend. If it comes in cash he gets the cash, and if it comes in the form of a stock dividend or of rights to subscribe, such are also worth money and can be conveniently turned into cash. After such cash has been received, the stockholder still has the stock certifi-

¹ See Chapter XII, p. 269.

cate and it is not unnatural that, without delving into the more intricate bookkeeping details of his investment, he should reason that his wealth has been increased by the value of the dividend which he has received.

But a moment's thought will show the fallacy of such a credo. The common stockholder is a part owner of his corporation and of all its surplus wealth or equity, after allowing for the current and fixed liabilities, including bonds and preferred stock which have prior claim on his company's resources. After such claims are satisfied, however, the residual wealth and assets of the corporation are his in direct proportion to the percentage of total outstanding common stock which he holds. The prior claims of other liabilities are definite. The equities for his common stock are indefinite. They are the "balance" of the company's assets over its liabilities — in simple form, they are the profit and loss surplus of his corporation. It is clear that any profits which the company makes will go to increase this surplus equity in the common stock, just as any losses or payments which the company makes will go to reduce this surplus, this balance, this equity, this true theoretical value of the common stock.

Dividends not a Fundamental Benefit

It is perfectly plain, therefore, that if the corporation makes profits on its common stock and does not pay them out in dividends, such profits go to increase the balance or equity behind the common stock, and so increase the basic and theoretical value of that stock. On the other hand, if the company pays out all of such profits on the common stock in dividends on that stock, it is equally plain that the company no longer has those profits, and the balance of equity, or the theoretical value of the common stock, is reduced by just the amount which the company has paid on the common stock.

It should be clear that every time a corporation makes a profit the worth of its common stock is raised to the owners of that stock. And every time the corporation pays out a portion of that profit on its common stock the worth of the stock is de-

creased to its owners by just the amount of that dividend. Instead of the dividends received on common stock being an addition to the net worth of the wealth of the individual who holds that stock, it is the profits realized by the corporation which increase his wealth. The profits are the important thing in the situation, and not the dividends which are paid.

The holder of common stock who celebrates the success of his corporation because it has just declared a dividend of \$10 per share on his common stock is not celebrating logically. For the value of his stock is reduced by just that \$10 which he receives. He would be more logical if he celebrated the fact, apparent perhaps several years previous to the dividend payment, that his corporation had actually earned that \$10 per share on the stock which he owns. For, theoretically, it was at the time when such profits were actually made that his net worth was increased, and not when the dividend was paid.

A Specific Example

Let us suppose that Mr. Angell bought one share of American Consolidated Cotton (a mythical concern) in January at \$100, which we shall consider the theoretical, as well as the actual, value of the stock at that time. Now let us suppose that his company completes a profitable deal in which the total profit, divided by the number of common stock shares outstanding, amounts to \$10 on each of those shares. The theoretical value of Mr. Angell's stock has been increased by just the amount of that profit, or \$10 per share. It is another question whether the actual market price of American Consolidated Cotton will immediately advance the amount of that increased value for the stock and sell at 110 in the open market. That depends upon "market" considerations and we are now speaking only of the theoretical side of the question. If the actual market value is in consonance with the actual value of the stock it would sell up to 110. Theoretically, in any case, Mr. Angell has already received that \$10 profit on his share of stock, since the value of his stock has been increased by that amount, whether he sells it for that increased

price or not. It is at the time when the corporation makes its profits and when the net equity of the corporation's stock is increased, and not when dividends are paid, that the holder's wealth is truly increased.

Let us suppose that the directors of American Consolidated Cotton decided to pass on this profit, or increased equity, to the owners of the business, the common stockholders. They declare a dividend of \$10 per share on the common stock of the corporation. When that dividend is paid Mr. Angell will receive \$10 in cash. He will also still have his original stock. He may therefore feel that he has just realized a profit of \$10 on his share of stock. But when that dividend is paid the value of his stock must theoretically drop the amount of the dividend, and will go back from \$110 to only \$100. So that instead of having a \$110 share of stock before the dividend was paid, Mr. Angell now has a \$100 share of stock and \$10 in cash. What is the difference from a fundamental standpoint? There is none.

Of course, Mr. Angell's stock following the dividend is worth just as much as when he bought it at 100. But the point is that the true increase in his wealth came with the increase in profits of his corporation and the consequent increase in value of his stock, and not with the actual payment of such profits to him in the form of a dividend.

“Ex-Dividend”

The clear conception of this theorem is necessary for a clear understanding of how and why a stock goes “ex-dividend.” We have spoken of such action in previous discussion¹ but have left detailed explanation until now. We are now conversant with the theory that the value of a stock drops by the amount of the dividend which is paid upon it. From the consideration which brought us to this realization it is also clear that the value should drop at the exact moment when the corporation pays out such dividend to the owner of its stock.

In practice this is not the case, since a corporation must have

¹ See Chapter IX, p. 177.

time to make out its dividend checks, address them, mail them and tend to other details. The corporation's stock may be constantly changing owners and it takes some time to make such changes of name, address, etc., on the corporation's records. The corporation must therefore set a final date after which the change of its stockholders' records of ownership will have nothing to do with the individuals who are to receive any particular dividend. When a corporation declares a dividend, therefore, it declares such payment to "stockholders of record" on a certain date, usually about two weeks before the date on which the dividend is payable.

Importance of Date

This means that when checks for the dividend are mailed, on the date on which the dividend is payable, they will be mailed only to those individuals who were shown to be owners of the company's stock on the official date when the company's stock transfer books were closed for payment of that dividend. The company, therefore, has plenty of time to issue new stock to the new owners for old stock of the old owners on ownership changes which were reported to the company before the "record date" for payment of the dividend. Any changes in ownership of stock made after that date of record will not be recognized by the corporation with respect to that particular dividend, and the payment of such dividend will go to the individual in whose name the stock was issued on the date of record.

If he has sold the stock previous to the date of record, without giving notice of such change in ownership to the corporation before the date of record, then he will receive the dividend, even though he did not own the stock on such record date. He will then be expected, of course, to pass the dividend on to its rightful owner when it is received.

In almost all cases this "date of record" for a corporation dividend corresponds with what is known as the "ex-dividend date" in trading in the stock on the various stock exchanges of the country, and both terms are usually interchangeable. We

have seen that in the case of a stock certificate which is endorsed in blank, and is "good delivery" for stock exchange commission houses, the true ownership of such a stock certificate may change rapidly and repeatedly without the stock certificate being sent back to the corporation's agent to have the company's record changed, the old owner's name cancelled and the new owner's name substituted.

The corporation records, as of their dividend record date, or the ex-dividend date for the stock, may show John Jones as the owner of the stock, even though Mr. Jones has long since sold and delivered the certificate to James Smith and he, in turn, to Harry Green. The corporation will mail its dividend check, nevertheless, to John Jones who stands as the rightful owner on the books of the corporation. Mr. Jones will therefore have to send the dividend on to Mr. Smith and he, in turn, to Mr. Green who happens to be the actual owner of the stock when it goes ex-dividend.

Closing the Dividend Books

It is apparent, therefore, that the actual market value of a stock cannot drop the amount of the dividend upon the exact day when such dividend is payable, due to the fact that it takes time to make out checks, etc., and the corporation therefore recognizes owners of the stock on a date previous to the date the dividend is payable. It is also apparent that this does not matter so long as the person who receives the dividend is also the one to suffer the compensatory decline in the value of the stock. It is perfectly equitable, therefore, that the value of the stock should automatically decline in market value on the day when the corporation closes its books for the dividend involved, which is also the day when the stock goes ex-dividend, rather than that such market decline should take place on the day when the dividend is payable and checks are received.

The transactions of John Jones and James Smith and Harry Green were all made prior to the record date or the ex-dividend date. Harry Green, being the true owner and holder of the stock

at such date, is entitled to receive the dividend, even though he gets it in a rather roundabout manner, due to the fact that the certificate has not been sent back to the company to have its true owner's name corrected on the company's books. Since Harry Green is entitled to receive the dividend, he should also suffer the compensatory decline in the market value of the stock, and this he does when the stock goes ex-dividend.

Market Price Drops on Ex-Dividend Date

For on this ex-dividend date for any stock, the market price of that issue theoretically drops the amount of its dividend. If the stock closed at 110 the day before it goes ex-dividend, and the amount of the dividend to be paid is \$10, then theoretically the opening price the next morning, on the ex-dividend date, would be only 100. This is theoretically equitable because the individual who owned the stock the evening before would be entitled to receive the \$10 dividend while the individual who bought it the next morning would not be entitled to receive such payment. In practice, of course, the decline is not always exactly the amount of the dividend, depending upon the ordinary action of supply and demand for the stock in question. But such stock would almost certainly drop approximately the amount of the dividend which it went "ex."

Take now the case of Harry Green, who was the rightful owner of the common stock of American Consolidated Cotton the morning it went ex-dividend. He will not receive his \$10 dividend on this day, since the dividend is not payable for perhaps another two weeks. But on such payable date he will receive it, either from Mr. Jones or from Mr. Smith. His stock has now gone ex-dividend, however, and theoretically it is now selling for only 100 instead of 110 as of the previous night's close. Thus Mr. Green has \$10 in cash coming to him to make up for the fact that his stock sells \$10 lower this morning than it did last night. But suppose that Harry Green sells his stock for \$100 to George Black on this morning after it has gone ex-dividend. The dividend has not yet been paid and Mr. Black will own the

stock when the dividend is paid, but he does not receive the dividend because he was not the owner when the corporation's books were closed for record of that payment, or on the date the stock went ex-dividend.

This is equitable since he has paid \$10 less for the stock today than he would have had to pay yesterday. Mr. Black would have been pretty angry if he had had to pay as much for the stock today, without being entitled to the dividend, as he would have had to pay yesterday, when he would have been entitled to the dividend. Likewise, Mr. Green would have been pretty happy if he could have sold his stock, ex-dividend, today for as much as he could have sold it for yesterday, before it went ex-dividend. For that would mean that he would have the \$10 dividend in cash and still have his stock with a value of 110 instead of only 100.

The True Significance of "Ex-Dividend"

The equity of the "ex-dividend" date and its accompanying adjustments is therefore clear; likewise, we hope, the fact that from a theoretical standpoint it makes absolutely no difference whether the owner of a stock receives a dividend on his holdings or not. If he does not receive such dividends the value of his stock is not affected. And if he does receive such dividends the value of his stock drops theoretically and automatically the amount of the dividend which he receives. There is no logical basis for the desire of many stock market traders who "want to hold the stock for the dividend." They would be just as well off theoretically, and generally from a practical market standpoint as well, if they sold their stock the day before it went ex-dividend, rather than continuing to hold it until the day it does go ex-dividend.

Let it be fully understood that stock traded on the first sale of the day it goes ex-dividend is not entitled to receive such dividend. If the holder wishes to sell his stock before it goes ex-dividend he must complete such sale on the day before and cannot wait until the actual ex-dividend date.

All that we have said with reference to the cash dividend applies equally to both common and preferred stocks or to any stock on which dividends are paid. Such qualities also apply equally to payments in other values than cash, including the stock dividend and the granting of rights. The two latter methods of paying dividends, however, are confined in practice almost entirely to common stocks.

Types of Dividend

Stock dividends fall chiefly into two types, either regular stock dividends (dividends payable in stock) or extra stock dividends, and there is little difference between the two. Any stock dividend is payment by the issuing corporation of additional stock in place of cash on the stock already held by the corporation's stockholders. Regular stock dividends, or dividends payable in stock, are merely dividends regularly paid in stock. Although dividend payments on common stock fluctuate more widely than on preferred or senior issues, any well-managed and conservative corporation will attempt to keep its stock on a definite and steady dividend basis, such dividends being usually paid quarterly, or every three months. The dividend rate is usually on an annual basis, however, a \$100 par, seven per cent. stock paying \$7 per share per annum, generally paying such amount at the rate of \$1.75 per share per quarter.

In the case of regular stock dividends, or dividends payable in stock, the corporation elects to pay such returns in stock, almost always of the same issue, instead of in cash or other values. A \$100 par common stock might be on a dividend basis of seven per cent. per annum in stock, which would mean that the holder of one share would receive $\frac{7}{100}$ of an additional common share each year or $\frac{17}{10,000}$ of an additional share each quarter. Many corporations pay regular dividends in a combination of cash and stock, Sears, Roebuck common stock, for instance, paying a regular dividend of \$2.50 per share per annum, plus four per cent. per share per annum in additional common stock, during 1929.

The Regular Dividend Rate

It is corporation practice to have a definite and regular rate of dividend for the common stock, whether it be in cash or in additional stock. If prosperity allows passing on additional profits in additional dividends the corporation will often pay "regular extra" dividends for a while, in addition to the regular payments. If profits again decline the regular extra dividends are omitted first, of course, while if profits continue to gain, and the corporation feels it can continue the total higher payment regularly, the regular extra dividend will be incorporated with the regular dividend and the total payment then be called a regular dividend.

Extra Dividends

Extra stock dividends are similar to extra cash dividends, and are paid only at rare intervals and on special occasions in addition to regular cash or stock dividends. Such payments are usually considerably larger than regular dividends. The plain term "stock dividend" usually applies to such extra stock dividends, while regular stock dividends, payable at regular stated intervals and at regular stated rates, are more often called "dividends payable in stock."

The extra stock dividend is usually paid when a corporation has been paying regular dividends at only a portion of its actual earning rate for a number of years; that is, the profit equities have exceeded actual dividends, so that the value of the stock has been increased gradually by increase of the equities or the surplus of assets over liabilities by "plowing back" surplus earnings into the business. Such surplus is naturally represented both in the balance sheet of the company and in actual market value of the stock.

The surplus in the balance sheet can be reduced by transferring part of the surplus account to the common stock capital account, both these accounts being on the liability side of the balance sheet. When additional stock is issued through a stock dividend

the common stock liability of the company is increased and its surplus is decreased by an equal amount. Payment of such a stock dividend automatically reduces the market price of the stock by the value of the dividend, just as in the case of a cash dividend, and thus the double motive of the corporation is accomplished — that of reducing both its profit and loss surplus in the balance sheet and the selling price of its stock in the open market.

Ex-Dividend on Stock Dividends

The reason why the price of a stock drops in case of a stock dividend is just as plain, and perhaps more so, than in the case of a cash dividend. In the latter case the company reduces its actual cash resources by the amount of the dividend. The number of shares of common stock, or part ownerships, remains the same but the assets applicable to them are reduced. In the case of a stock dividend the company pays out no cash and its cash assets therefore remain the same as before. But it increases the number of shares of common stock, or part ownerships, so that the assets must be divided by a larger number of common stock shares, or claims of ownership, and the equity behind each share is thus reduced.

Let us say that American Consolidated Cotton Corporation has 1,000 shares of common stock and a surplus of assets over liabilities of \$100,000, excluding from its liabilities the 1,000 shares of common stock. Each share of common will therefore be worth $\frac{1}{1,000}$ of \$100,000, or \$100 per share. Now suppose the company makes a sudden profit of \$100,000, to take an extreme but simple example. The surplus of assets over liabilities now jumps to \$200,000 and each of the 1,000 shares of common stock is now worth \$200 per share instead of only \$100. If the corporation pays out the \$100,000 profit by declaring an extra cash dividend of \$100 per share, its surplus will again sink back to the original \$100,000, and so will the value of the common stock drop back from \$200 to only \$100 per share when the stock goes ex-dividend the extra payment of \$100 per share.

But suppose that the company decides to pay a stock dividend of 100 per cent. Each original share will receive one additional share as its stock dividend and the total number of shares will be increased to 2,000. Each share will thereupon have as its true value or equity $\frac{1}{2,000}$ of the surplus of \$200,000, or only \$100, instead of $\frac{1}{1,000}$ of the surplus of \$200,000, which previously gave a true value of \$200 per share of common stock, before the number of shares outstanding was doubled by payment of the stock dividend.

What Good are Stock Dividends?

In the case of large extra dividends, in either cash or stock, there is probably present in the directors' minds the desire to "do something nice" for the stockholder, to give him some definite sign of his company's prosperity. We have seen that from a fundamental and theoretical standpoint, the extra dividend means nothing so far as the stockholders' wealth or value of the stock is concerned. Such action, therefore, when it is taken in this light, is either a result of the same popular misconception on the part of the directors, or else merely an admission of such a misconception on the part of the stockholders. Both cases are unfortunately quite common.

To do justice to the business sense of the average board of directors, however, it must be stated that they are more likely to be influenced by another more reasonable result of an extra dividend. This is the reduction in the market price for the common stock involved. The average investor, or even the speculator, would much prefer 100 shares of a stock selling around 50, to 25 shares of a stock selling around 200.

There are various reasons for this popularity of low priced stocks. One is the psychology of being able to say, "I have 100 shares of American Cotton" instead of only 25. It sounds bigger and better. Another is that the margin buyer can multiply his chances of gain (as well as of loss) by purchasing more shares of a low priced stock than a high one on the same margin, the margin being lower, of course, for a low priced stock, to say nothing of

smaller commission for execution of orders. There is also the probability that a high priced stock may decline much further and more rapidly in a weak market than a low priced stock. "The bigger they are the harder they fall."

Advantages of the Stock Split-up

The main advantage from the corporation's standpoint, however, is the increase in the number of shares of its common stock outstanding and the wider distribution for that stock. It stands to reason that a greater number of individuals are likely to be stockholders of a company with 1,000,000 shares of common stock outstanding than of one with only 100,000 shares of stock outstanding. A wide distribution of stock is advantageous for a corporation because it advertises the company and increases its good-will, as well as makes less likely the possibility of sudden and wholesale liquidation in the company's stock.

Dividends in Stock

The practice of paying regular dividends in stock is of comparatively recent origin. Its use has spread rapidly in recent years, and yet the great majority of large corporations have not taken up the custom but continue to pay their regular dividends in cash. The practice of making regular dividends payable in stock has come in for a great amount of discussion and there have been voluminous arguments presented both for and against the custom. There are unquestioned advantages as well as disadvantages to the practice, and the test of the policy lies in which direction the major considerations tend according to each particular capital organization, business and general situation.

We are by this time familiar with the tenet that from a fundamental and theoretical standpoint it matters not a whit whether dividends are paid in cash or stock. It matters no more, as a matter of fact, than whether they are paid at all. The value of one's stock is fundamentally based upon earnings and surplus equities and not upon the dividends paid.

In practice, of course, this is not always true. It does matter a great deal to the investor whether he is receiving dividends on his stock or not. But since these dividends are based upon, and merely the result of, the profits which the corporation is making, the investor's fundamental concern is once more with profits rather than dividends.

Dividends in Scrip

In making differentiation between paying dividends in cash or in stock, there are many practical questions involved which do not appear in the theoretical consideration. It must first be understood that since the quarterly dividends on small blocks of stock, in stock, do not usually amount to a full share, or at least total up to fractional share balances, the company must issue certificates for these fractional shares, which are commonly called "scrip." The stockholder may sell this scrip, or fractional share, on a basis of the price for a full share; he may wait until he gets enough fractional scrip to make a full share and then exchange it for such a full share; or he may purchase additional scrip in the open market, or from the corporation, to make up a full share of the stock.

Thus it is seen that if the common stockholder wishes to, he may convert his stock dividend into cash with only a moderately greater effort than if his dividend were actually paid in cash. Naturally, however, the investor who wants his dividends in cash would prefer to get them that way to having to convert them. On the other hand, some investors prefer to get their dividends in stock for it makes reinvestment of income, in that particular stock, easier and somewhat automatic. From the standpoint of the corporation also this point is an advantage, since the investor who receives dividends in stock instead of cash is actually buying new stock from the company with his dividends. For if the stockholder were not satisfied with his stock dividends the corporation, if prosperous, would sooner or later be inclined to pay such dividends in cash. Then it would not be so certain that such cash would find its way back to the corporation in the purchase of additional stock.

Advantage to the Corporation

Probably the main advantage to the corporation, however, through paying dividends in stock instead of cash, is closely linked with the consideration noted above. That advantage is in the saving of its cash resources. The profits that are built up in any business are not always purely liquid. In fact they are usually far from liquid, and in order to pay cash dividends the company may have to make some sacrifice to turn its assets into cash in order to pay the dividend in cash. Furthermore, a company which is expanding rapidly has need of most of the cash which it receives, and if it must pay out quarterly dividends in cash it may well be embarrassed by lack of adequate liquid capital and cash resources. But all such elements are done away with if the stockholders of the company are willing to accept their dividends in additional stock instead of in cash. The advantages of such methods have been particularly apparent in such rapidly growing industries as the public utilities. Here the expansion has been so rapid that the corporations have had need of all the cash they could get. The practice of paying dividends in stock has therefore flourished chiefly in this classification and with apparent success, except in isolated cases where poor management entered the picture.

One of the disadvantages in the practice lies in the size of the dividend received or paid out. The connection between earnings and cash dividends is much easier to see directly than the relation between earnings and stock dividends. It is a comparatively easy matter for a corporation to issue additional stock without the public, or the stockholder, realizing how such action may reduce earnings per share, because such reduction of earnings may not show up until the next annual report. It is a temptation, therefore, for corporation directors to pay dividends in stock at a higher rate than actually justified by earnings, whereas if they had to pay such dividends in cash they might either fail to find enough such cash or else they would think twice about paying out an amount in excess of the cash which the stock was actually earning.

Disadvantage of Dividends in Stock

In other words, a corporation which is only earning \$4 per share per annum on its \$100 par common stock would hardly feel justified in setting its dividend rate at \$5 per share per annum, for it would then be paying out a greater amount of cash than it had received to pay out. But since no cash would be required to pay dividends in stock it would be comparatively simple for the corporation to declare dividends of 10 per cent. per annum in additional stock. This would be at the rate of \$10 per share per annum if the stock were selling at par, and would seriously impair the additional stock's value as well as its earnings, but the public would not be so quick to see this situation, and the actual impairment of per-share earnings would not be likely to show up until profits were figured on the increased number of shares at the next earning report, perhaps nearly a whole year off.

The insidious element in paying dividends in stock lies in the fact that in order to keep earnings per share at an equal amount each year, total earnings must be increased at a greater rate each year, since each succeeding year sees a greater number of shares among which total profits must be divided. So long as total profits continue steadily to expand at the necessary rate all is well, but if there is a sudden let-down in such profits the earnings per share drop just that much more rapidly, due to the ever-growing number of shares outstanding.

A Specific Example

Take the case of the American Consolidated Cotton Corporation once more, with its 100,000 shares of stock. If it earned \$600,000 in one year, or \$6 per share, it might pay out all of its profits by paying a six per cent. stock dividend which would bring its common share total to 106,000 shares. In order to continue earning \$6 per share on this additional total of common shares, it would have to show a profit of \$636,000 in the following year and so on. Whereas if the dividend had been paid in

cash the total number of shares would have remained constant at 100,000 and a profit of only \$600,000 in the following year would still have shown \$6 per share on its stock.

The theory is, of course, that the company would be able to earn its increased quota of \$636,000 in the following year, since it began the year with \$600,000 additional assets or capital which it did not pay out in cash. The theory is valid chiefly if percentage earnings on capital used may be figured out ahead of activities and may be depended upon from one year to another. This is largely true of corporations like the public utilities, where charges and therefore profits are based upon percentage income on capital invested, and accounts for the successful adoption by these corporations of the system of paying their dividends in stock instead of cash.

Dividend Dependent on Market Fluctuations

Such practice also places greater emphasis upon the market value of the stock, from the standpoint of the owner. The amount of actual cash, or the true value, of his stock dividend, depends upon the market value of the stock on which the dividend is paid at the precise moment when it is paid. If his dividend amounts to 10 per cent. and his stock sells at 100, then the cash value of his dividend is \$10 or 10 per cent. But if the stock drops to 60 by the time the next 10 per cent. dividend comes around, then the cash value of his dividend has shrunk to only \$6 even though he is still receiving dividends at the rate of 10 per cent.

The price at which the actual purchase of the original stock is made therefore plays an important role. If the holder paid 100 for the stock and it dropped to 60, then his true dividend yield would be only \$6, or six per cent. on his original purchase price, whereas the dividend rate would still be 10 per cent. of the then current price of 60 for anyone who bought it at that later price. The whole effect of paying dividends in stock, therefore, from the holder's standpoint, is that it multiplies his holdings, and his interest in the actual market value of the stock.

From the standpoint of the amount of stock which he holds the stock dividend remains always the same. But the actual cash value of the dividend is entirely dependent upon the price for which the stock is then selling in the open market, regardless of the price paid.

Granting of Rights

The third major method of giving definite values to stockholders is that of offering rights to subscribe to additional stock either of the same issue or of some other issue, at prices below the actual market price for such stocks. If a corporation's stock is selling in the open market at 100, and the corporation offers its holders the right to buy additional stock at 80, then it is apparent that unless a great volume of additional stock is offered the original holder can buy the new stock at 80 and sell it in the open market at not far from 100, thus realizing a profit of nearly \$20 per share on each share thus acquired. We shall see later that such an illustration is somewhat extreme, but at least it indicates how the value of such rights originates.

This method of pleasing the stockholder and at the same time raising additional funds for the use of the corporation became extremely popular in recent years, due chiefly to the high prices at which most stocks were selling in 1928 and most of 1929. Those high prices were theoretically a result of an active demand for the company's stock. Why, then, should the company not supply that demand to at least a moderate degree, by the issuance of some additional stock? The stockholders would be pleased to get their valuable rights, the corporation would be pleased to get some additional cash and the market price of the stock would be reduced moderately and brought back down to more popular levels.

Usually a corporation will offer only additional stock of the same issue, at perhaps 10 per cent. or more below the current market selling price, and will offer only about 10 per cent. in additional number of shares to those already outstanding. On rare occasions, however, a corporation comes into possession of

some valuable stock which it does not care to retain in its treasury and therefore offers to its own shareholders. American Superpower Corporation, early in 1929, offered to its Class A and Class B stockholders the right to buy United Corporation common stock, without warrants, at a price of 25, in the ratio of one share of United for each two shares of Superpower held. Since United Corporation common was then valued at considerably over this figure the rights were valuable to holders of Superpower.

Calculating the Value of Rights

Calculating the value of rights is generally considered an arduous task or even a mysterious rite, known only to the "experts." In practice, there is nothing difficult or intricate about it, once the principle involved is understood. The quickest way to such an understanding is by means of a specific example.

In June, 1929, the United States Steel Corporation decided to raise additional funds, for the purpose of retiring bonds and other corporate purposes, by offering additional stock, at advantageous prices below the actual market value, to individuals who already held some of that common stock. United States Steel common stock was selling at about 190 in the open market, and in order to understand the theoretical compilation of values for dividend rights we must assume that the actual market price of the stock is also its true asset, or equity, value.

The Approximate Method

With Steel selling at 190 in the open market, holders were offered the right to buy one additional share of Steel common at 140 for every seven shares of common which they currently owned (at the ex-dividend date for the issuance of such rights). It is perfectly apparent that the holder of Steel common was getting a right to cash value, since he had to pay only 140 for something whose true market value was around 190. Nothing is simpler than to see that he profits to the extent of about \$50 for

every share which he can buy at the lower, or bargain, price. And nothing is simpler, in figuring the *approximate* value of one right, or the value which attaches to a single share of the stock currently held, than that it would be one-seventh of \$50, or about \$7.

In other words, if the holder could buy one new share at 140 and sell it again at 190, for every share held, the worth of his right would be \$50. Since he can buy one new share and make this \$50 profit on it, only for every seven shares held, the worth of a right on one old share will be one-seventh of \$50, or about \$7. This is the simplest and easiest method of calculating the approximate value of rights.

The above simple method gives only *approximate* results however — results somewhat higher than the actual and more technical methods of figuring the exact value of such rights. Granted that the true value of the old common stock of United States Steel Corporation is its market price of 190, the shares after the new additional stock is issued will not be worth that figure, because the total number of shares will have been increased by one-seventh again as many as before the issuance of the new stock. Now if the company sold this new stock for the theoretical asset value and the actual market price of 190, then the total amount of new stock, after the additional issue, would still be worth \$190 per share.

But the company does not get “full value” for the additional stock it sells. It gets only \$140 per share instead of \$190. On the additional stock issued, therefore, there will be a decline of \$50 per share in value from the true value. The amount of this new stock issued is equal to one-seventh of the stock already outstanding which is worth \$190 a share. When the new stock is issued, therefore, there will be seven-eighths of the new total with a value of \$190 per share and one-eighth of the new additional total of stock with a value of only \$140, or \$50 less. This reduced value of the one-eighth of the total is spread out over the entire eight-eighths, however, since every new share must have the same value. The actual value of the new shares, therefore, will be reduced by one-eighth of that \$50 per share decline

in the new stock offered, or a decline in the average stock of \$6.25. This is the true value of one "right," therefore, but to reach the figure logically we must go on with our deductions.

The Second Method

After the new stock is issued it is seen that each share of the new stock will have an actual value, not of the previous \$190 per share, but \$6.25 less than that, or a new value of only \$183.75. Now the holder of an old share who can buy a new one for \$140 does not receive quite so much value as if the new stock were going to be worth \$190 instead of only \$183.75. The actual value for every share of the new stock he can buy at \$140 and sell at \$183.75 is, of course, the difference between subscription price and selling price, or \$43.75. But for each share of stock now held he can buy only one-seventh of a new share at the reduced price, so the true value of his right per old share is one-seventh of \$43.75, or \$6.25. This is the true and actual value of his right to buy the new stock, and it will be noticed that this true value, arrived at by rather devious theoretical calculation, is somewhat less than the approximate value we arrived at through the easier and simpler method before described.

The Formula Method

We have gone into somewhat intricate details in explaining the true method of figuring actual rights on fundamental grounds. Once the principle involved is understood the mathematical procedure may be summed up in the following formula.

Let X equal the number of shares of old stock necessary to buy one new share.

Let Y equal the market price of the old stock.

Let Z equal the purchase price of the new stock.

The formula is then as follows:

$$\left[\left(Y - \frac{Y-Z}{X+1} \right) - Z \right] \div X = \text{value of one right.}$$

Taking the previous example of Steel, we first have Y (190) minus Z (140), or 50, divided by X (7) plus 1, or 8, giving 6.25. Subtracting this 6.25 from Y (190) gives 183.75, or the result of the formula in parentheses. This figure minus Z (140) gives 43.75, or the result of the portion of the formula in brackets. Dividing this result of 43.75 by X (7) gives 6.25, or the value of one right.

This formula seems to the writer the simplest one of all the various forms used for computing such values of stock rights. Another fairly simple one may be offered, however, since we are now familiar with the principles involved. The holder of seven old shares of Steel at 190, or \$1,330, can get another share at \$140, giving him eight shares with a total value of \$1,330 plus \$140, or \$1,470, or a value of one-eighth of this amount per share, or \$183.75. The value of his new shares, therefore, will be only \$183.75 against an actual market value of \$190 per share, giving the value of his right on one share as the difference between \$190 and \$183.75, or \$6.25.

We have now reviewed the three chief and common forms of dividends on stock, especially of common stock. They are dividends in cash, in stock or in rights to subscribe to other stock. We have also discovered the actual cash values of such dividends. Moreover we have seen that such dividends do not actually enrich the holder of stock who receives them, because when the corporation hands out such values its own values must be reduced by just that amount and the value of each share of stock on which the holder receives such values is reduced by just the amount of the value received.

“ Ex-Rights ”

The market price of a stock on which rights to subscribe have been declared drops theoretically, and usually in a practical manner, just the value of the right declared, on the date when the stock goes “ ex-rights,” just as we have seen that a stock drops the value of its cash dividend, or its stock dividend, on the day when the stock goes “ ex-dividend.”

We have seen that the holder of one old share of United States Steel received a right worth \$6.25 to him if he cared to exercise it, or take advantage of the right to buy additional stock at the price named below the actual market. Such rights are transferable and negotiable. Therefore, if the holder did not care to take on any more Steel common he might have sold his right to someone else. Where rights are valuable, there is usually an active market for trading in such rights, and most organized stock exchanges have facilities for listing and trading in such rights.

If the holder of Steel had decided to sell his rights in the open market, therefore, he could have done so, theoretically, and practically, too, at a price of \$6.25, or $6\frac{1}{4}$ on the New York Stock Exchange. This is just the amount which the market value of United States Steel would drop the day it went ex-rights, theoretically, so that in point of practice it makes very little difference whether the holder of a right to subscribe actually exercises that right himself or sells it to another in the open market.

Sell or Exercise All Rights

The important thing, however, is that he do one thing or the other with his right before it expires. Subscription rights are usually issued with a definite expiration date, after which the offer to subscribe to additional stock closes. The rights thereafter have no value whatever, and the importance of exercising or selling one's rights before the date of their expiration is readily apparent. Between the time of offering the rights and their expiration dates, generally about a month or less, the price at which such rights are traded in varies with the varying market prices for the stock itself to which the rights to subscribe apply. Following the drastic declines late in 1929, rare and interesting situations developed wherein the market value of some stocks dropped below prices at which rights were offered to additional stock. The rights thus lost their own value and in some cases were cancelled.

No general rule, naturally, can be laid down for the time to sell one's rights, if that is the course decided upon, any more than any general rule can be laid down as to just when the highest price for any stock will be reached. It seems to the author, however, as a result of his experience and careful research, that the price of rights to subscribe (as well as the price of the stock itself, of course) more often declines than advances as the time for expiration of the rights approaches. In point of theory this is borne out logically by the delay which most holders of rights practice in deciding whether they will exercise them or hold them. The percentage who finally decide to sell their rights instead of exercising them generally make the decision not so very far from the expiration date, and the pressure of this volume of rights on the market for sale is likely to exercise a depressing effect upon the market value for the rights, as well as for the stock itself. Usually, however, the market for the stock will effect the price for the rights more than vice versa.

Logical Time to Sell Rights

It is the author's opinion, therefore, that if the holder of a right to subscribe decides to sell that right, instead of exercising it, he will more often than not realize a better price for his right if he sells it early in the period of its life and active trading, rather than wait until close to the expiration date. There are plenty of exceptions to this theorem, however, and it must be definitely impressed and realized that this is not a rule in any sense but merely a tendency in the experience and judgment of the author.

We have previously seen the logic in the ex-dividend date for any kind of dividend on any stock traded in at varying prices in the open market. We have seen that the ex-dividend date in the market generally corresponds with the "record date" of the corporation paying such dividend, on the day as of which it makes up the official list of stock owners who are entitled to receive the dividend by virtue of their ownership on that day.

Exchanges May Set Ex-Dividend Date Rulings

There are exceptions to the practice of making the ex-dividend date for a stock the same as its record date. Sometimes the record date is not announced and not definitely known to stock exchange authorities; sometimes the corporation's books of record are closed for a week or more during the official recording of owners for that dividend; sometimes confusion arises within the company itself as to just when its date of record will be; and sometimes special technical considerations involved in stock trading itself make it necessary or advisable to set an ex-dividend date arbitrarily and without regard to the exact date of corporation record.

The stock exchange officials reserve the right to set such ex-dividend dates, to defer them and to take various other time liberties with them. In most cases the ex-dividend date is not deferred more than a few days and corresponds quite closely with the corporation date of record. In rare instances, however, the stock exchange authorities will rule that a stock on which a dividend has been declared "shall not be quoted ex-dividend on" a certain date, perhaps previously announced, or the date of corporation record, and "not until further notice." The stock is therefore dealt in with the "dividend on" until such date as the authorities subsequently announce shall be the official ex-dividend date. There is neither injustice nor confusion in such arbitrary ruling so long as the traders and commission houses always know definitely whether they are trading in the stock with dividend or ex-dividend. So long as transactions in the stock are thus understood, the subsequent adjustments for the actual dividend can go on as usual between buyers and sellers and between the various brokerage houses.

CHAPTER XVI

AN INTRODUCTION TO STOCK ANALYSIS

Back to Fundamentals

In our efforts to become more familiar with the theoretical and practical sides of stock market trading we must necessarily go far afield from fundamentals, but sooner or later we must always return to our old and oft-repeated theorem. Buying and selling of stocks is nothing more nor less than purchase and sale of part ownership in physical and producing properties. The fundamentals which a potential investor should look for in any stock he buys, therefore, are the same fundamental considerations which might well engage his attention if he were considering setting up a particular business of his own.

The basic consideration in both cases, and in all such cases, is the possibility of profit, or income. When a man buys a house, or a radio, or an automobile, he does so because he expects to get an income from such investment — not a cash income but a psychic income, in the form of the psychic enjoyment which he and his family will get from those purchases. When a man buys a business property, or any other type of property, for investment, he expects to get income and profit from it, in cash or cash equivalent. When a man starts out in a business of his own he does so because he expects a profit from his investment of cash and labor. Likewise, when a man buys stock, merely a convenient insignia for part ownership in a business, he does so because he expects to realize income or profit through the medium of his investment.

What Makes a Stock Attractive?

It is not difficult to see that the chief end in view as regards the purchase of stocks is profit. If it were just as easy to see what

particular stocks will yield profit rather than loss, then the author, along with many other financial writers, would perhaps be a street-car conductor, and the reader, presumably, would not be perusing these lines. It is not enough, then, to say that the probability of profit is the chief factor which makes a stock attractive. The probabilities must be further delineated, and the question resolves itself into what gives a stock greater probabilities of making profits for its owner than other stocks present. As a general introduction, the reader may turn to Plate 70, on page 421, for the graphic summary of some important factors to be considered in stock analysis.

Recalling once more that the buying of stock is only the individual's entrance into a business venture, we can easily see that the particular business line of his company plays a great part in determining the relative attractions of any stock. No sane individual would go for profit into the hypothetical but proverbial business of selling electric fans to Esquimaux. No more would any sane individual buy stock in a company which had such business as its purpose and basis of operations.

The Company's Business

In general the better stock will be in a company which fills the more important need of the public. A public utility stock is superior to stock in a company manufacturing necktie clasps because not a particularly large proportion of American citizens wear necktie clasps, whereas practically all of them either use electricity directly or consume products which are manufactured through use of electricity.

The better stock will be in a company whose product has a wide market and whose product is a necessity. This does not mean that stocks of corporations supplying luxuries may not be good stocks, but they must have other advantages to counterbalance this factor.

The profits of operation in supplying necessities for the public are so well known that competition has become keener in such lines than in others. Competition is therefore another important

factor in the business of a company. Granted that two companies produce public necessities for public consumption, the better company of the two will be the one in whose line there is the least competition. Many companies operate with a local viewpoint. If they produce goods only for local consumption then their potential market is not so large as the nation-wide concern's. The latter concern, therefore, has the advantage unless the local company has sufficient control in its own district to lower its costs and shut out competition from the national corporation. Even then there is danger of local buying power depletion affecting the local company, whereas the national concern is comparatively free from local depressions.

The company manufacturing a product which is used chiefly in only a few industries is under a greater disadvantage than the concern whose product is used by a large number of industries. Depression comes in the life of almost any industry, but if a concern's product is used by many lines then there will usually be some good consuming lines even when others are in the throes of temporary depression and depreciated buying power in their particular field.

Seasonal Influence

Again, the product of one concern may have a wide, active and national market only at certain seasons of the year. This company's business fluctuates on a seasonal scale and it must make up in high seasonal profits what it loses in the off-seasons to be equally attractive with a company whose products have a continuous market. To a large degree all companies are affected by purchasing power and consumer prosperity, but the "luxury concerns" are hardest hit by a general business depression. During the famous post-war depression the luxury concerns did not suffer such great inventory losses on account of falling commodity prices as did some of the other corporations, but they were in many cases even harder hit indirectly, through curtailed purchasing power of the public with regard to such specialized luxury purchases.

The "Depression-Proof" Stock

The amusement group of industries make the claim that during hard times their receipts are just as high as during general prosperity, since people have more time to go to theaters, movies, etc. The theory has not been adequately tested but it appears to have some merit from a theoretical standpoint, but also from such a standpoint the claim would tend to transfer the amusement companies from the luxury class to the necessity type of corporation, or the "depression-proof" stock.

New Invention Industries

A new industry, resulting usually in modern times from new inventions, like the airplane, the radio, talkies, television, etc., has possibilities for great profits, but individual factors may make the actual realization of such profits extremely problematical. Such companies are up against high costs of research, the constant discovery of new improvements, and finally, in most cases, the rapid development of cheap and troublesome competition in the new field.¹

Past history shows that such new businesses make good profits, and larger profits in the stock market, than the old-line companies, for perhaps the first year of their existence. Then a period of depression has generally followed, due to over-expansion, competition, over-capitalization, inflation of securities, etc. During such depression of perhaps anywhere from one to five years all but the strongest concerns are gradually weeded out, and those remaining in the field, through the survival of the fittest, eventually come through into the true prosperity which was originally predicted for all the companies who have fallen by the wayside.

In general, therefore, experience would indicate that stocks in new industries, resulting from new inventions, do not always make the best long-pull investments, though they are usually good for rapid and often spectacular profits if purchased early enough.

¹ See Chapter XVII, p. 423.

Management

Closely connected with a company's business is the factor of management. It is especially important in selecting securities to be held for the long-pull. The most attractive stock to buy is the stock which will show the greatest appreciation. Such appreciation is largely dependent upon growth of earnings. And growth of earnings is largely dependent upon the quality of management given in any corporate organization. We have likened the purchase of stock to an individual business undertaking often enough for the reader to realize the importance of selecting good managers to run his business and handle his capital to the best advantage.

Other things being equal, good management is likely to give even a stock with poor current earnings and seemingly unfavorable prospects a good measure of attraction. Conversely, poor management detracts materially even from a stock with currently high earnings and seemingly good prospects. It seems safe to say that good management is most often found in companies whose prospects at least have promise. There are plenty of examples of a good and new management coming into a run-down corporation and revivifying it into a money-maker in a short space of time. And it is highly improbable that the good management would have entered the picture if the company's outlook had been hopeless. For even good management does not work alone for the love of the game.

Because there are so many such good managers and because the matter is so important, it would be unwise to present even examples of such management in this volume, since such mention might be construed as merely "playing favorites," while the entire list could not be authoritatively or completely presented. Suffice it to say that when a large banking house or a well-known and well-reputed captain of industry enters the directorship or executive staff of any company it is a tremendous boost to the prospects and attractions of that company's stock for the future.

Following the Business Leaders

The reader must become familiar for himself with the industrial giants of American corporate accomplishment. If he watches their moves and follows them from one interest to another, from one executive management to another, he should reap a small measure of their own reward for their genius of accomplishment. And, conversely, there are a few names, happily not as large as the successful ones, which spell danger to any corporation they enter. The names are large and well known but they are known more for their own personal greed, mismanagement and dispersal of corporate assets than for their building up of strong organizations or profitable concerns. These names also must be learned gradually, either by personal experience or by studying the experience of others through past corporation history. It goes without saying that the latter method of learning is the least expensive.

The Corporation Balance Sheet

Being satisfied with the comparative probabilities of profit and management in the firm's business is merely the first step in determining the most attractive stock to buy. Next, it would pay the potential investor to consider the balance sheet of the corporation, its assets, liabilities, surplus, general financial position and capital set-up. The capitalization of a concern may have a decided influence on the profits which accrue from steady business to the common stockholder.

Where a company's earnings are sufficiently stable, or well enough defined and regular, the greater the amount of money which can be borrowed to do business upon at reasonable rates, the greater surplus of profits will be available for the common stockholders or the owners of the business. If a company can borrow money by issuing bonds at five per cent. and is pretty sure of being able to realize an average return of seven per cent. on the money so borrowed, then the greater the amount of the

bonds compared with outstanding stock, the greater will be the resultant profit for such common stock.

A company cannot "safely" issue bonds, however, unless its earning power is fairly well established or unless it has sufficient surplus assets to allow of paying regular interest on its bonds even during some intervening years when profits may not cover such interest, or even in years when the company's operations will result in a net loss instead of a profit. Railroad, public utility and other companies with strong assets or steady earnings, therefore, are generally better off as regards common stock earnings if they have a relatively large proportion of their capital in bonds, or even in preferred stock, on which the dividend is stable at a fixed rate, presumably a rate lower than that at which the corporation can realize profits on its total investment.

On the other hand, most of the motor car corporations carry small issues of bonds and preferred stock, if any, since their profits are more erratic and it would be embarrassing for them to pay interest on bonds if it was not being earned, whereas, having their capital chiefly in common stock, they need not worry if profits do not cover dividends because they are under no obligation to pay such dividends unless they are earned.

Proportions of Security Capitalization

The proportions involved in corporation capitalization vary widely, of course, with different concerns, different situations, different lines and differing considerations of the factors discussed above. Naturally, the stronger the corporation is the greater proportion of bonds it may carry. Conversely, however, the smaller proportion of bonds a corporation carries, in comparison with stock, the stronger the position of the company in a financial way. This is true because if profits drop off the company with a large proportion of common stock will merely suspend its dividend on such stock and conserve its assets and working capital. The corporation with a large proportion of bonds has this steady fixed charge hanging over its head and must pay interest on the bonds whether any profits are avail-

able for such payment or not, which results often in further serious depletion of the company's finances and surplus position.

It is only good corporation construction, therefore, to have a fairly even balance between stocks and bonds, under ordinary circumstances. No hard and fast rule may be laid down, of course, but usually corporation capitalization may be divided with about 35 per cent. in bonds and 65 per cent. in stock. If the stock consists of both common and preferred, then perhaps 15 per cent. of the total may be in preferred stock and the remaining 50 per cent. in common.

New York, Chicago & St. Louis Railway

The older a company gets the more established its record of profits, and the stronger its financial and surplus position the higher it may safely raise its proportion of bonds. A good example of how this proportion works out is seen in the case of railway concerns like New York, Chicago & St. Louis, or Nickel Plate. The company's earning record has been good, and out of a total capitalization of about \$180,000,000, it has around \$120,000,000 in bonds and only \$60,000,000 in stock. Earnings on the total capitalization have been ample to meet the regular bond interest on its funded debt, and the surplus earnings, though not particularly large in total, work out to a comparatively large figure per share, due to the comparatively small number of common shares outstanding. In 1928 the company earned around \$20 per share on its common stock, though actual net income, over previous charges, including interest on the bonds, was only about \$8,000,000.

During periods of high stock market prices, when the public has plenty of money, confidence and appetite for common stocks, the temptation to raise additional working capital through sale of common stock is too great to be denied, and during such periods as 1928 and 1929 the proportion of stock to bonds in corporation capitalization increased rapidly. We have seen how United States Steel Corporation, for instance, offered additional stock, through the issuance of rights to sub-

scribe, to its previous common stockholders to the amount of over \$350,000,000 in the early summer of 1929, increasing its outstanding common stock by that amount, but using a goodly share of the proceeds to call in and redeem its various bonds, thereby increasing the proportion of common stock to bonds in its capital set-up.¹

Giving the Public What It Wants

The wisdom of such a move does not jibe easily with our previously expressed theory that it is better for a corporation, especially a strong one like United States Steel, with fairly stable earning power, to increase its borrowed and fixed capital and reduce its common stock, or raise the proportion of bonds in relation to stock. The company's attitude was justified, however, by the public itself and by the theory that it is only good business to give the public what it wants. The public was so eager for the common stock of United States Steel Corporation that it was willing to pay higher prices to the company for such stock than ever before in its corporate history. Indeed, the public was willing to accept a yield of only five per cent. on the new stock, which was about equal to the bond yields.

Furthermore, the public was not in the mood for buying bonds and the corporation therefore got a much larger amount of capital by offering stock than it would have by offering bonds. If, in the future, the steel industry should meet depression and the public appetite shift from common stocks back to bonds once more, then United States Steel Corporation could again finance its growth by sale of bonds at a more advantageous price than by sale of stock. It is also much easier to sell bonds during a time of depression than to sell stock. By "giving the public what it wants" such corporations who have adopted this practice during the time of stock popularity have raised their capital in the easiest way and have also arranged their capital structure so that when public demand has once more shifted to bonds they will be in a position to give the public what it wants once

¹ See Chapter XV, p. 365.

more, without unduly overbalancing the proportion of bonds to common stock.

The principle holds, therefore, recent corporate tendencies to the contrary notwithstanding, that the corporation able to finance itself by a relatively large proportion of bonds to stock will show greater profits on its common stock than the corporations not so situated.

Size of Stock Issue

Somewhat the same principle involved in the above conclusions indicates the advantages for the common stockholder in any corporation with fair profits, good prospects and a small amount of common stock outstanding. In the case of very small concerns whose business is small and not likely ever to grow much and whose profits are therefore also small, a small amount of common stock does not spell any great advantage for the common shareholder. But in the case of a company whose business has large potentialities, which is expanding or may expand in the future, or whose profits are likely to increase either gradually or rapidly in the coming years, a small number of common shares is a most decided advantage, whether there are additional bonds and preferred stock or not.

The reasoning behind such a theorem is not involved. It is based on the practical fact that it is easier for a growing corporation to double its profits in five years if those profits are originally low, than to double them if they are originally high. In other words, it is easier for a corporation to increase its profits from \$1,000,000 to \$2,000,000 than from \$50,000,000 to \$100,000,000. There is no basis for such a conclusion in theory but it is a truth in actual practice. If the company, starting with net profits of only \$1,000,000 on 100,000 shares of common stock, or \$10 per share, increases its profits only \$1,000,000 the earnings per share will jump from \$10 to \$20. If the corporation with net profits of \$50,000,000 on 5,000,000 shares of common stock, or \$10 per share, increases its profits \$1,000,000 to \$51,000,000 the new earnings will advance only to \$10.20 per share. The theorem would

not be valuable, of course, if both companies increased their profits at an equal rate. In practice, however, the company with small capitalization and small earnings is more likely to increase its profits and per-share earnings at a more rapid rate than the company with a large capitalization and correspondingly large earnings.

A Case in Point: Auto-Lite vs. Jersey Standard

A comparison in point is that between Electric Auto-Lite and Standard Oil of New Jersey. In the first nine months of 1929, Electric Auto-Lite Company, with only 885,000 shares of common stock outstanding, increased its net profits to less than \$10,000,000 from \$6,500,000 in the same period of 1928. Per-share earnings, however, due to the small number of shares, jumped from \$7 in that period of 1928 to over \$10 per share in 1929. Standard Oil of New Jersey, on the other hand, increased its profits from \$40,000,000 in 1927 to over \$100,000,000 in 1928, a gain of \$68,000,000. With nearly 25,000,000 shares of common stock outstanding, however, per-share earnings advanced from \$1.50 in 1927 to only \$4.40 per share in 1928. Incidentally, the common stock of Standard Oil of New Jersey advanced from a low in 1928 of 40 to only 80, whereas the Stock of Electric Auto-Lite advanced from a 1928 low point of 60 to a high price of around 174.

Such a theory is not meant to disparage the purchase of common stocks in large and strong companies, or in those with a large capitalization. The theory has its exceptions and qualifications just as have other theories. Naturally, the concern with the larger capitalization and the larger profits to begin with is likely to be the stronger company, and its stock the more dependable of the two. Likewise, the company with small earnings and small capitalization is much more speculative, since it takes only a mild depression or a few bad months to reduce a company's net profit from \$1,000,000 to nothing at all, whereas it would take a good-sized slap to reduce a large corporation's earnings of \$50,000,000 per annum to a net deficit for any year.

Understanding the Balance Sheet

Before we go further in our consideration of balance sheet items which influence the comparative attraction in any given stock, we must be certain that the reader is familiar with the make-up of an average balance sheet and that he realizes just what it is, what it represents and what are its limitations. The balance sheet, in principle, is nothing more nor less than an inventory of the asset value of any corporation, in much the same manner as an individual might appraise his own estate. Every individual has some tangible assets, even if it is only the clothes on his back. So long as he can realize cash or credit on such ownership, or even so long as it represents an original outlay of cash or credit in acquiring the ownership, then that ownership theoretically has a tangible asset value and may be counted as one of the items to make up the asset side of his personal balance sheet or estate.

What any man's estate is worth is naturally the value of his assets minus his liabilities. On the asset side he may list his home, his investments, the cash value of his insurance, property, automobile, savings and checking account balances, etc. On the liability, or opposite, side of his personal balance sheet, he must list all his debts, or all items which tend to offset the assets he has listed. On the liability side, therefore, will appear any mortgages on his home or other property, installments due on his automobile, radio or what not, any loans or notes which he has contracted and which are still outstanding, unpaid balances, loans or debit balances on his security ownership and any and all bills or accounts payable. Having listed all of his assets and liabilities, the former minus the latter gives the net worth of the individual's estate, it being assumed, though not always true, that the individual has more assets than liabilities and therefore has a net worth, or profit and loss surplus. If liabilities are greater than assets, then the individual is insolvent and his balance sheet shows a profit and loss deficit instead of a surplus. This does not mean that he dies a speedy death but it does indicate that his position might be improved.

Make-up of a Balance Sheet

The corporation balance sheet differs only in degree, and not in theory, from such a personal balance sheet. The corporation lists on the asset side of its statement all of its assets, the value of its land, buildings, machinery, inventories of unsold goods or raw materials, the value of its accounts receivable and all other loans due to it, securities held, cash on hand, etc. These assets are divided into two categories, fixed or permanent assets and current assets. Fixed assets consist of those items which do not change very rapidly, or are comparatively fixed, like the value of land, buildings, etc. The current assets consist of assets whose value is more changeable and upon which the corporation can realize cash value more quickly, like its loans due from others, its securities, its inventories and its accounts receivable. The current assets are often called liquid assets, since they are much more liquid than the permanent assets; that is, they may be turned into cash more quickly in case of urgent need.

Both of the above types of assets are also known as tangible assets, since they are represented by actual property having a tangible value. Corporation accounting also takes cognizance of another type of asset, called the intangible asset. This consists of assets whose value is indefinite and cannot be realized on very quickly, like the value of patents, trade-marks and good-will. This last item is justified only in the case of corporations whose product is so well known and popular that its popularity and demand over other similar products constitutes a true value for the favored company.

Good-will is usually built up through merit and advertising. Examples of concerns who might legitimately show an intangible asset of "good-will" are the manufacturers of such products as Lucky Strike cigarettes, Gold Medal flour, Postum, Listerine, Coca-Cola, etc. These companies have an intangible asset value in good-will, mainly through their trade-marks, though it is more usual to put trade-mark intangible asset value in with the wide category of plain "good-will." Such good-will has been built up largely through nation-wide advertising, which is expensive.

Since every outlay of cash, from a bookkeeping standpoint, must result in the creation of an asset, it is allowable that advertising expenditures be credited to the increased intangible value of the company's good-will.

Good-Will and "Intangible Assets"

There are types of good-will, however, which do not spring directly from advertising, like the popular good-will attaching to the various five-and-ten-cent store companies, the well-known department, mail order and chain stores, etc. We have said that bookkeeping theory and practice allow increasing value for good-will items as intangible assets, yet in the best and strongest corporation balance sheets the valuation on the company's good-will, if indeed there is any shown at all, is very small, and is usually listed at the nominal value of \$1. Other things being equal the corporation which lists its good-will and other intangible assets at such a nominal value, or does not list them as an asset at all, represents a better and stronger company than the one which boosts its surplus and asset values by assigning a large figure to its intangible asset items.

Intangible assets are difficult to realize on and are therefore, of course, fixed and not current assets. It is a poor and suspicious practice of some weak concerns to inflate their balance sheet assets by ridiculously high valuations for good-will and other intangibles. Such high values should be closely scrutinized, and if they are not justified by popular demand for the company's product or by potential value of patents, good-will, trade-marks, etc., the high valuation should count against buying the stock rather than in favor of it.

Some value for such intangibles is justified in many cases, but a fine distinction must be made by the potential investor between justified and inflated values assigned to intangible assets. The actual earnings which a company can show over a period of years on such valuation gives a good test of whether or not its values are justified. Except in very rare instances it will be found that a company cannot earn a normal profit, of say six per cent. per

annum, on its total assets minus total liabilities, if intangible values on the asset side are more than such fixed assets as land, buildings and equipment.

The Liability Side

On the liability side of the corporation balance sheet must appear its liabilities in the form of the capitalization. The company is liable for payment or redemption of its bonds. It is also liable, in theory, to the stockholders for the amount of cash which it receives from them when they buy its stock, so liability items are shown for preferred and common stocks. If there is a par value for such stocks the liability is generally the number of shares outstanding times such par value. If there is no par value some unit price per share will be fixed to determine this item, usually the amount for which the shares were originally issued.

Other liability items include various reserves set up against items on the asset side, and such "current liabilities" as loans and accounts payable, accrued taxes, accrued interest, dividends and interest payable, etc. Also included on the liability side is the surplus item, or profit and loss surplus. This is the amount by which assets exceed liabilities. It is hardly to be considered a liability but is entered on the liability side of the balance sheet to make both sides balance, or from a technical bookkeeping standpoint. The surplus is considered a permanent liability, rather than a current liability.

Calculating the Working Capital

The degree of comfort which the corporation enjoys from a liquid standpoint, or its going assets, results naturally from its current items, both assets and liabilities, since these are the items it can realize on quickly. The difference between current assets and current liabilities is termed the company's working capital, it being assumed, of course, that a healthy company will have more current assets than current liabilities. When the reverse is

true there is a working capital deficit, indicating that the corporation is in poor liquid condition.

In analyzing the working capital, or liquid position, of a company it is not enough merely to follow the above formula for arriving at its working capital. This formula is too automatic. More special attention must be paid to the current items which go to make up this working capital, especially to the degree of liquidity in the current assets. The most liquid of current assets, of course, is cash on hand or on call. Next are government securities and other listed securities which could be realized on at a moment's notice. Notes receivable are more liquid than accounts receivable, and the latter begin to verge on the side of the poorer current assets.

Gauging the Liquid Position

The company whose current assets are made up of a large percentage of accounts receivable is not in good balance sheet position. Near the bottom of the ladder are inventories, since they may consist of raw materials or of antiquated products. Even if they consist of up-to-date and marketable products, however, their value as a current asset is none too good, since they might be difficult to realize on in case of an emergency, especially since such an emergency would hardly arise if the company's sales of its product were going along as well as they should. Suspect, therefore, also the company whose current assets show a very large proportion of inventory.

We are already familiar with the surplus item on the liability side of the balance sheet, which represents the company's balance of assets over liabilities. This figure is the equity, the value, the surplus worth of the corporation, and is extremely important. It is easy to see that this figure represents the financial strength of the company in large measure. It is the margin of safety in the corporation's affairs. Just as the surplus in a personal balance sheet shows the actual wealth or value of the personal estate, so the surplus in a corporation balance sheet shows the actual wealth or value of the company.

PLATE 67. BALANCE SHEET OF GENERAL MOTORS CORPORATION
(Condensed, Consolidated and in Round Millions)

As of December 31, 1928

ASSETS		LIABILITIES	
<i>Permanent:</i>		<i>Permanent:</i>	
Real Estate, plant, etc.	\$ 543	Preferred Stock	\$ 135
Stocks in Treasury	50	Common Stock	435
Subsid. Investments	118	Minority Stock Int.	3
Deferred Expense	20	Reserves:	
Goodwill, patents, etc.	44	Depreciation	162
<i>Current:</i>		Employee Funds	46
Cash	100	Surplus	285
Govt. Secs.	112	<i>Current:</i>	
Other Securities	4	Accounts Payable	61
Drafts	9	Taxes	57
Notes Receivable	8	Dividends Payable	45
Accounts Receivable	34	Miscellaneous	13
Inventories	196		
Miscellaneous	4	Total Liabilities	\$1,242
Total Assets	\$1,242		

The only intangible asset is that of goodwill, patents, copyright, etc., and this valuation of \$44,000,000 is therefore subtracted from the total asset item of \$1,242,000,000, leaving a true asset balance of \$1,198,000,000.

Liabilities which would have to be paid off before the common received anything, in theoretical liquidation, include the \$135,000,000 preferred stock, \$3,000,000 minority stock interest, \$46,000,000 employee funds and \$176,000,000 of current liabilities. Subtracting this total of \$360,000,000 from the asset balance of \$1,198,000,000, leaves \$838,000,000.

The \$162,000,000 of depreciation reserve must also be subtracted, however, since this is an offset to property asset valuation, leaving a final total equity for the common stock of \$676,000,000. Dividing this equity by the 17,400,000 shares of \$25 par value common stock outstanding gives us the true book value of about \$39 per common share.

The quick and approximate basis of calculation would be to divide the sum of surplus and common stock liability, or \$720,000,000, by the number of common shares, which would give the approximate, but somewhat high, book value of about \$42 per share.

Profit and Loss Surplus

The surplus results after allowance has already been made for the liabilities of bonds and preferred stock, so that the surplus, or balance, is actually the worth of the business and therefore the equity or property of the common stock. The preferred stockholders and the bondholders are interested in the amount of this surplus, for it shows them the strength of their company and the margin of safety for their investment, since, up to the amount of the preferred stock and bonds, they have first call on that surplus. Theoretically, of course, they have already been taken care of before the surplus is arrived at, but the surplus may have to be drawn upon for payment of bond interest or preferred dividends in time of depression and low current earnings.

To a much more important degree, however, the surplus is interesting to the common stockholder, for we have seen that in theory this item is his equity. It is the net worth of his corporation, after all other liabilities have been discharged, and is therefore his own property, his own wealth, the value of his own stock. It goes without saying, therefore, that the larger the company's surplus the stronger the company, the greater the value of its common stock, and the more attractive that stock.

Book Value

The equity for the common stock, resulting from the balance sheet surplus, or profit and loss surplus, is usually called the book value for the common stock. The book value of the common stock is nothing more nor less than the value of each share of such stock as computed from the corporation's latest balance sheet. In its most simple form it is arrived at by dividing the surplus and stock liability items by the number of shares of common stock outstanding. Many corporations, especially in the last couple of years, do not list the common stock liability and the surplus liability separately but lump the two together and give only one total item for "common stock and surplus." In

such a case the book value for the common stock is this total item divided by the number of shares of common stock outstanding.

How to Calculate a Stock's Book Value

Generally, however, a corporation balance sheet will not be quite so simple in its set-up, and a few other adjustments are necessary. Most balance sheets, for instance, present the common stock liability and the surplus items separately. In such case it is only necessary to add the two items and then divide by the total number of shares of common stock outstanding, as of the date of the balance sheet. The reason for adding these two items is readily apparent. Whatever liability is included for the common stock is part of the common stock equity, or book value, and is merely increased a further amount by the other item of surplus. If the common stock liability value is figured at par, or say \$100, then the book value of the common is already \$100 per share merely as a result of this liability item. The book value per share will be as much over \$100 (or whatever the value taken for the common stock in the liability item) as the total surplus (including reserves, etc.) divided by the number of common shares outstanding.

For other adjustments in determining true book value for a stock from the balance sheet, one's good common sense must be utilized. For instance, if there are reserves set up on the liability side which are not definitely an offset to some item on the asset side, then such reserves are also included with the surplus in arriving at the common book value. Reserve for depreciation is an offset to the asset property and equipment values on the asset side and is not a common stock equity. Capital reserves, general, foundation reserve, etc., are all truly a part of the common stock equity, however, and are generally used in calculating the book value for the common issue. On the other hand, intangible assets are generally deducted from the surplus before computing book value, since they do not constitute any definite realizable asset value at the time of making up the balance sheet. Plate 67 shows

a sample balance sheet of General Motors Corporation, with the approximate and true methods of calculating book value for the common stock.

Book Value is a Nominal Figure

It must be stressed that the book value calculated from a corporation balance sheet is a purely nominal, a purely theoretical, figure. In theory, it is the net worth of the common stock and so, in theory, it is the value which would accrue to the common stock if the business were suddenly shut up, all assets realized upon, all prior claims paid off and the entire business liquidated. In practice, of course, the balance sheet book value would probably never work out as the actual cash value which the stock would finally receive in such liquidation of the business.

For one thing, the theoretical book value depends upon the value which the corporation puts upon various assets and liabilities, and these are not necessarily the true values for such items. For another thing, in the actual winding up of a company's affairs asset values generally go through a process of shrinkage, various extraordinary items appear, and the entire picture is distorted from that shown by the balance sheet of the corporation when it was a going concern.

Hidden Assets

On the other side of the picture, the book value of many strong corporations is considerably larger than that shown by the theoretical book value computed from its balance sheet. A favorite practice of large and strong corporations is to hide assets by excessive charges for depreciation, marking down of assets below their true value, etc. Such items are termed "hidden assets." The habit is perhaps not strictly legal, but it is difficult to say when such a tendency goes from the category of plain conservatism into the classification of deliberate concealment. In the latter case the motives are either to discourage public holders of stock and get them to sell to the "insiders" at low prices, or,

more often, to avoid payment of corporation profits taxes on large current earnings.

Earnings as a Fundamental Factor

We have seen the importance of the company's business and its balance sheet in deciding comparative attractions of individual stock issues. The most important consideration, however, as one might suppose, is that of the corporation's actual earnings. The value of any stock depends more upon income either actually delivered to the stockholder, or potentially deliverable, than upon any other item. And such factors depend in turn upon the earnings, or profits, actually realized. In a previous chapter we have noted that the price and value of a stock automatically drop when a dividend or other payment is made upon it.¹ We tried in that discussion to show that, theoretically, the value of the stock advances the amount of that dividend payment not just before the stock goes ex-dividend, not when the dividend is declared, but when the profit is actually realized which makes possible that payment.

From such a theoretical standpoint, therefore, and working back from the decline of a stock as it goes ex-dividend, the advance in value of any stock is based very directly upon the earnings. Indeed, the business of any company is important merely as it affects the chances of the company's possible profits. Likewise, the balance sheet items and book value of a stock are important largely as they relate to this basic factor of earnings. In the past, the company's current financial position, represented in the balance sheet, is the result of the company's earnings. In the future, the current financial position, or balance sheet, is important chiefly as it affects the corporation's probabilities of making good earnings in the future.

Earnings vs. Balance Sheet Items

The balance sheet and book value for any stock are important, therefore, but they are not so important, in judging the stock's

¹ See Chapter XV, p. 353.

attraction, as are its earnings, past, present and future. The truth of this statement is found in almost any example the reader cares to consider. The balance sheet of American Woolen Company in recent years has been a strong one. The book value for the common stock held above \$100 per share for many years. Yet the stock itself fluctuated around a low level of less than \$20 per share in the open market during 1929 and the early part of 1930, because American Woolen, though in strong financial position, was in the midst of a depression in its business dating back to 1926. The company showed actual deficits in several years and in 1928 there was a loss of over \$1,000,000. Market valuation was thus based much more upon current earnings and prospects for earnings than upon the company's financial position as shown in its balance sheet or than upon the theoretical asset or book value of the common stock.

An Example: Du Pont

On the other hand, there is Du Pont de Nemours common stock. The company is, of course, in a very strong position from a balance sheet standpoint, yet the book value for its new common stock at the close of 1928 was only \$28 per share and has not advanced a great deal since then. Still, Du Pont new common stock sold above 200 in 1929, because the company showed earnings of about \$6 per share in 1928 with promise of more than that in 1929. Here is the case of a stock with low book value selling at a high price due to high earnings and good earning prospects.

Importance of Publicity in Corporation Statements

The corporation earning statement is therefore just as important as, and probably more so than, the balance sheet. They are both very important, and the writer would make it almost an iron-clad rule to buy stocks only in corporations which issue regular and intelligible statements of both types — the balance sheet and the earning statement. These two reports are corol-

PLATE 63. EARNING STATEMENT OF SEARS, ROEBUCK AND Co.

(Consolidated Income Account for Year Ended December 31, 1928)

Gross Sales	\$ 346,973,915
Less: Returns, Allowances, Discounts, etc.	27,200,128
Net Sales	319,773,787
Add: Sales by Factories and Other Income	8,986,527
Total Receipts	328,760,314
Purchases:	
Including difference in inventories, wages, general and selling expense, advertising and all administrative charges	289,809,473
Repairs on Plant and Equipment	1,417,903
Operating Profit	\$ 37,532,938
Deduct:	
Depreciation	\$ 4,003,171
Tax Reserve	4,412,198
Employee Funds	2,209,667
	<u>\$10,625,036</u>
Net Income	10,625,036
	<u>\$ 26,907,902</u>

At the close of 1928, the company had no bonds or preferred stock outstanding and a total of 4,284,418 shares of no-par common stock. Per share earnings were therefore the net income of \$26,907,902 divided by 4,284,418, or \$6.28 per common share for the year covered by the earning statement.

If there had been bond interest or preferred stock dividends paid or payable, those amounts would have been subtracted before arriving at the net income figure, though common dividends would not. Where preferred dividends are cumulative they must be subtracted, whether they are being paid or not, since their theoretical claim precedes that of the common issue.

In the above example the amount carried to Profit and Loss Surplus for the year was the net income, less a little over \$10,000,000 paid out in cash dividends on the common stock.

laries in the field of corporation finance and the analysis of individual stocks. They interlock one with the other, and together they form a pretty complete picture of any company's financial status and give a pretty good check on the comparative attractions of any corporation's securities. As the balance sheet shows the status of the corporation at any given time, indicating its actual financial position and background, so the earning statement shows the results of the company's operation for a given period.

The balance sheet shows the corporate position at any given time. The earning statement shows its record during any given time. The balance sheet is the stereopticon slide, or the X-ray, of the corporation picture, while the earning statement is the motion picture. Both are accurate views of the company, but one is of still life, showing potential strength, while the other is of the corporation in actual action, showing its accomplishments.

Make-up of the Earning Statement

The earning statement is self-explanatory. It is a statement of corporate earnings. It may cover any space of time, generally three months, six months, or a full year. It may be full and detailed or sparse and in skeleton form. In order to qualify as an earning statement it need only state that the corporation earned a certain amount of net income in a certain period. That, in itself, is tremendously important news for the holder of the company's common stock, for it tells him how profitable his company, and his investment, has been during that period.

The complete and ideal earning statement is issued at least every three months, or every quarter, and is called a quarterly earning statement. It shows, if it is an ideal and full report, the company's sales billed and its selling and miscellaneous expenses, resulting in the net manufacturing profit. Then it shows other income, itemized and detailed, resulting in total income. Then it shows deductions for interest, depreciation, depletion, dividends and other extra charges, resulting in the final figure of "net income." From this total figure it is easy to calculate the earn-

ings per share, merely by dividing the net income by the number of common shares outstanding at the close of the period covered by the earning statement.

Plate 68 presents a sample earning statement of Sears, Roebuck & Company, and shows the method of calculating per-share earnings.

Net Income

The net income, or balance of corporation profit, after payment of interest, dividends, etc., is carried to the corporation's surplus and thus forms the link between the earning statement and the balance sheet. If the company's quarterly earning statement shows profits of \$3 per share on the common stock, and the dividend paid is only \$2 per share each quarter, then the remaining \$1 per share is carried over into the corporation's profit and loss surplus and goes to strengthen the balance sheet picture and the general financial background of the company.

On the other hand, if the quarterly earning statement shows only \$1 per share earned and the dividend paid per quarter is \$2 per share, then the company has paid out more than it has actually earned. In such a case the previous accumulated profit and loss surplus has been drawn upon to the extent of \$1 per share for that quarter and the corporation's balance sheet or financial position is impaired to that degree.

In theory, it is dangerous for any company to continue paying dividends when they are not being earned, for the perfectly apparent reason that such payments deplete the permanent asset position of the company. In practice, a company may pay dividends even when not earned, if its business is seasonal and it is reasonably certain that increased profits in later periods will more than make up for the deficit incurred by payment of the current dividend. Such action is also justifiable in the case of very strong concerns which have built up a huge profit and loss surplus in the past and can safely afford to draw down that surplus moderately during a temporary period of depression, main-

taining an unbroken dividend record, even though earnings do not cover the full dividend during the period of temporary depression.

American Locomotive Company

An example may be found in the case of American Locomotive Company. The concern did not earn its regular common dividend of \$8 per share per annum for several years, during a rather protracted decline in business, but such dividends were continued without interruption and with at least temporary safety for the financial position, since profit and loss surplus was over \$30,000,000 in 1926 and still stood at the very comfortable figure of \$24,000,000 at the beginning of 1929, even though such surplus had been drawn upon to pay the regular common dividends for nearly three years. It is in such a case that the importance of a strong profit and loss surplus is especially recognizable.

Since this matter of earnings and the corporation earning statement is so important in judging the comparative merits of individual stock issues, it is of prime importance that earning statements be issued regularly, promptly, accurately and frequently. The practice of issuing such earning statements quarterly has largely displaced in recent years the old practice of issuing earning statements only annually. It must be said, however, that a great many corporations still adhere to their old policy of issuing only annual statements. It must be admitted that a great many strong and reputable concerns still refuse to issue quarterly, or "interim," statements and failure to do so is not necessarily a condemnation of the stock. Other things being equal, however, the advantages of owning a stock whose earnings are available quarterly, instead of only once a year, are readily apparent.

Importance of Interim Earning Reports

Except in the case of a very new concern, where sufficient time has not elapsed to make an earning statement practicable, there

seems no legitimate excuse for any corporation's failure to issue regular earning statements at least once a year, if not oftener. A few corporations, whose stock is listed but very closely held, do not issue any earning statements but are known to be so strong and to have such favorable earnings that their stock is none the less in popular favor. With the exceptions noted, failure of a going concern to issue earning statements at least once a year may generally be taken to indicate poor management, poor earnings, or a desire to hide something detrimental to the company, and the prospective purchaser would do well to pass up such an issue for one where he at least has a chance of knowing his company's position and record, even if it is a poor one.

Depreciation and Depletion Charges

We have previously mentioned the items of depreciation and depletion as constituent parts of the full earning statement. Depreciation is a bookkeeping charge made against profits for the benefit of keeping actual balance sheet value representative of actual cash value, as well as to provide a fund for replacement of property, plant or equipment against which the charge is made. If a new plant is built at a total cost of \$1,000,000, that amount may properly appear as a fixed asset on the corporation's balance sheet, theoretically to balance a decline of that amount in the cash or other assets of the company. If, at the end of 10 years, however, it is figured that the plant will be of no practical value and have to be replaced by a new plant to cost \$1,000,000, then the rate of depreciation will naturally be 10 per cent. per annum, or \$100,000.

Consequently, \$100,000 per annum will be deducted from the company's earnings as depreciation against this particular building, and its balance sheet value will decline \$100,000 each year for the 10 years of its life. Each year, therefore, its declining value will represent its true value, making allowance for its gradual obsolescence, but at the end of the 10 years the corporation will have its full cost of replacement, or \$1,000,000 in cash or other assets with which to replace the structure. It is readily apparent

that some such system of depreciation is not only useful and accurate but is also justified and necessary for any properly managed company. Such depreciation should be charged against any assets which suffer such depreciation, including plants, machinery, equipment, etc.

Rate of Depreciation

The rate at which depreciation is charged may vary considerably and does vary, of course, with different types of equipment, the rate of operation and other special considerations. The best and most conservative companies charge depreciation on buildings at from seven to 10 per cent. and on equipment at from 10 to 20 per cent. per annum.

Depletion is the charge made against profits on account of depletion of the corporation's raw material resources which are included as fixed assets in the balance sheet. Depletion is charged chiefly by mining companies, whose main resources are their underground supplies of ore or other raw materials, and by oil producers, whose chief resources are their stores of unproduced petroleum. Here again, the same principle applies as in the case of depreciation; namely, the gradual reduction, through use or other cause, in the value of a company's fixed assets, for which balance sheet and bookkeeping provision must be made.

Rate of Depletion

In depletion charges the rates charged vary even more widely than in the case of depreciation. Since the actual value of underground resources are difficult of certain estimate, so it is difficult to estimate the proper depletion rate to charge against such resources. Most mining concerns of conservative management charge a minimum of around 10 per cent. of gross value of tonnage mined, while petroleum concerns charge a minimum of about 15 per cent. of gross value of the oil produced.

It is apparent that with so much leeway in rate of charges the potential investor cannot set himself up as judge of whether a

corporation is making adequate charges for depreciation and depletion. In most cases he can tell whether they are at a fair rate, however. And by and large, it is more important that he know that such charges are being made than that he know whether the rates being charged are equitable or sufficient. He should be certain that any industrial concern he is investigating makes at least some charges for depreciation. He should be certain that any mining or petroleum concern he is investigating is at least taking into account the depletion of its reserve supplies. If the company is not doing so, then the prospective investor should himself take such charges into consideration.

Depletion Charges in Mining Companies

Other things being equal, the better companies are the ones which make adequate charges for both depreciation and depletion. In the case of mining concerns it is particularly important that depletion be allowed for. In the case of some mining concerns depletion and depreciation charges are not figured until the end of the year, so that their quarterly, or interim, earning statements are issued "before depreciation and depletion." The potential investor should be on the lookout for such a situation lest he be misled by the higher figures. To get the true earnings it is necessary to prorate the previous year's charges, and even then, of course, only an approximate figure is obtained. Other things being equal, it appears more satisfactory to buy stock in a company whose interim statements make pro rata charges for depletion as well as depreciation.

Liquidating Companies

In some rare cases, confined almost entirely to mining concerns, companies make no allowance for depletion, because if they did they would not show sufficient earnings to pay any dividends. Such concerns are known as "liquidating companies," since they are gradually returning to the stockholder a portion of his investment in the dividend payments. An example is Mother

Lode Coalition Mines Company. This mining concern paid regular dividends at the rate of 40 cents per share per annum, even though its earnings, if adequate charges were made for depletion, would be much less than that dividend. Since the company is making no bookkeeping charges for depletion, the value of its underground resources is constantly going down without being offset by other asset items, and the value of the property, and therefore of the stock itself, is also constantly declining.

In such a case, therefore, the stockholder should realize that his dividend is not being paid entirely out of earnings, but out of assets, and that such dividends are therefore a gradual return of capital, and not pure income on his investment. Such a company is known as a liquidating company because it is gradually liquidating its assets and paying them out to owners of the company's stock. The price of this stock has declined from about \$7 in 1926 to prices of around \$2 in 1930. At such levels it gives a seemingly very attractive return of about 20 per cent., but the return is not in the nature of a dividend return, but in the nature of a return of invested capital.

Reserves for Taxes

Practice is divided between those corporations which estimate charges for corporation profit taxes in their quarterly statements and those which ignore such taxes until the end of the year. In the latter case it is only good and fair management that the corporation report state that the net profits are before allowances for taxes, or "before taxes." Other things being equal the quarterly statement is more satisfactory if it includes estimated charges for such taxes.

CHAPTER XVII

PRICE AND YIELD IN STOCK ANALYSIS

Fundamental Factors in Stock Analysis

We have seen in the preceding chapter that the comparative attractiveness of a stock is dependent upon such chief factors as the company's business, its balance sheet, earnings, etc. The study of these factors in connection with any individual stock, however, cannot be completed with a resultant "score" for the stock involved without reference to the selling price of that stock. It would be manifestly inconsistent and illogical to say that every stock with a good business, strong balance sheet and high earnings is an attractive purchase, or, conversely, to say that every stock which does not have these qualifications to so high a degree is a poor risk.

The stock with good business, strong balance sheet and high earnings may be selling for two or three times what it is actually worth, in which case it is not an attractive purchase. Conversely, the stock without these qualifications in so high a degree may yet have fair recommendations and fair prospects and be selling so low that it presents definitely bargain prices, and is therefore an attractive purchase.

Price is of Prime Importance

It is easily recognizable, therefore, that the factors of a company's business, balance sheet, earnings — in fact, all considerations connected with the company or its stock — must be considered not alone, but in relation to the market quotations for the stock, before any rational decision can be made as regards the comparative attraction of such stock.

There is perhaps no more important factor in judging a stock under normal conditions than this element of price in relation

to its other and more basic fundamental attractions. Such a statement is almost self-evident, since the buyer and seller of stocks, especially if he is trading in the market, is primarily interested in the price of his stock. All other factors are important only in so far as they may affect or regulate that changing price. Unfortunately, there is perhaps no other classification of stock market theory where there exists quite as much difference of opinion regarding any possible rules or regulations as in this matter of comparing the market price of a stock with its other various qualifications to deduce whether the issue is cheap or dear.

Price Factor Depends on Personal Analysis

Such a medley of opinion is not surprising, however, for from the basic theory of price movements and the motives which lead men to buy and sell stocks there must be a difference of such opinion or there could be no trading. To at least some measure of degree, every trade executed in any individual stock implies two diverging opinions as regards the price of that stock. The seller is likely to feel that the market price he receives is all the stock is worth, while the buyer is likely to feel that the market price which he pays for the stock is below its true value. Such a statement is not entirely true, to the extent that technical conditions enter into the picture and stocks do not always sell for what they are supposed to be worth, but at least trading in any stock indicates a divergence of opinion as regards price, whether it be the actual value price or the actual future market price for the stock in question.

It must be fully understood, of course, that there are hundreds of minor and individual considerations which may enter into the picture and help sway the balance of favor either for or against the purchase of a stock at any given price. That is where the "finesse" of true stock market forecasting and analysis lies, and that is why such work is a specialized business and why stock market analysts are able to buy shoes for the baby. All we can hope to do in this volume is to indicate some of the more impor-

tant factors which enter into such a weighing of values. For the reader should understand that this process of weighing values is nothing more nor less than stock market analysis, even though it be in crude and incomplete form.

Relation of Price and Fundamentals

The attraction of a stock is generally measured, therefore, by such factors as we have studied, and shall later study, in direct relation with the market price at which the stock is selling. We have thus far considered the three important factors of the company's business, its balance sheet or financial strength, and its actual earnings. How can these factors be related to market price? There is, of course, no formula for relating a company's business to the price or value of its stock. Such factors are too indefinite to allow an automatic rating, since they cannot be expressed in values or figures. The same thing applies to prospects, new inventions, management, etc., which we shall consider later in this chapter.¹

In the case of the corporation balance sheet, however, there is a figure which gives us a clue as to what the company's stock is worth, and therefore as to what it should be selling for. This is the book value of the stock, which we have previously discussed. Just as stock market opinion varies, so the proportion or weight which should be given to this figure of book value also varies. It is only one factor in the field of stock market analysis.

Book Value and Market Price

Other things being equal, a stock ought to sell in the open market for a price higher than its book value. This is due to the fact that the average stock should be earning profits over and above its dividend. Its book value is therefore constantly increasing, and the margin of its increase, plus other considerations like prospects, should account for the margin over true book value at which the stock sells.

¹ See Page 422.

It is the author's opinion that the average good stock, with good earnings, a good business, good management and good prospects, might be expected normally to sell for anywhere from 25 to 75 per cent. above its book value. The margin should be higher for low priced stocks, selling perhaps from one to 25, and gradually becoming lower for stocks selling above 25.

Earnings and Market Price

We have previously seen, however, that in actual practice the earnings of a stock are more important marketwise than its book value. In just the same manner, such earnings in relation to price are more important marketwise than the stock's book value in relation to price. It is simple enough to make a formula for connecting earnings with price. This connection is called the "price-earnings ratio" and is the number of times actual annual per-share stock earnings for which the stock should sell in the open market.

Unfortunately, it is not so simple to find agreement upon the actual ratio which should be used. Here again we come up against the intrusion of other factors, like book value, management, new inventions and, especially in recent years, the factor of future prospects.

It would be palpably ridiculous to suppose that any stock should sell for just what it earned in any one year. Such earnings are potentially payable to the stockholder, and the stock's market price must also include book value, or the assets behind that earning power, prospects, etc. For a stock to sell for exactly what it earned per share, or on an earning ratio of only one, would be like paying for the goose that lays golden eggs only the value of one egg.

The Price-Earnings Ratio

It is generally conceded that the average stock is justified in selling for at least eight times its annual earnings. In past eras there were plenty of authorities who used this ratio in analyzing

the theoretically fair selling price for stocks. In the "golden age" of recent years, however, this ratio has been moved up considerably, and there are now plenty of authorities, whether correct or not, who maintain that good stocks should sell for from 15 to 20 times their earnings per share, basing their feeling, apparently, in confidence of future growth.

The Basic Criterion of Values

This whole question of the price-earnings ratio is perhaps the most significant one in relation to stock market analysis. During the long period of rising stock market prices, especially from 1924 to 1929, there developed a struggle of words and theories between different schools of thought. The analysts who went by the old conservative price-earnings ratio naturally held that stock prices were too high, while the newer and perhaps more radical group contended that prices were not too high, basing their conclusions upon the new theory that stocks may fairly sell for from 15 to 20 times their earnings.

During recent years, notably in 1928 and most of 1929, the new school appeared to have the better of the argument, at least so far as actual market valuations were concerned. For prices of the best grade stocks were maintained at levels from 15 to 20 times their actual per-share earnings. Since the Stock Panic of 1929, occurring in the fall of that year, very little has been heard of this "new basis," and it seems fair to assume that practical conditions prevailing in markets of recent years may have been due to excessive inflation and to temporary and extraordinary circumstances.

It is not the author's intention to intrude his own views in this volume to any greater extent than is necessary for clarity. It must be admitted, however, that the abnormally high prices maintained for stocks in recent years were accompanied by abnormal situations in many ways, and that in certain directions there were indications long since that speculation was driving favored issues to price heights unjustified by actual earnings or future prospects.

“The New Era?”

Without attempting to disprove that “a new era” in stock prices and price-earnings ratio may have dawned to remain indeterminately, it is only consistent that we study the old and more conservative theories which led to previous ideas regarding the ratio. Until the past few years, market analysts generally accepted the true and conservative ratio at 10. In other words, given average healthy circumstances and an average stock, the stock is justified in selling for 10 times its annual earnings. Since it is generally impossible to prophesy what earnings the stock will show at any given future time, it is necessary to base this ratio upon the probable earnings for the current year, taking into account per-share earnings for the previous full year and any interim statements which the company may make, its prospects and indicated profit trend at the current time.

If such factors are not available, or are unreliable, then it is generally safe to use the per-share earnings of the previous year, adding a moderate increment in one's estimate for the current year if business is advancing and granting perhaps an increase of from five to 10 per cent. in earnings per share per annum. Such an increment is fairly generous, but is thrown out merely as a suggestion. The estimate for each stock must, of course, depend upon many diverse considerations which go to make up the entire picture. As an example, however, of the price-earnings ratio of 10, an average stock which indicates earnings during the current year of \$6 per share would be justified in selling at a market price of 60. A stock with earnings of \$10 per share would sell at 100, and so on. In each case it is necessary only to multiply the per-share earnings of the current year by 10 to arrive at the theoretically fair selling price for the stock in the open market.

“Ten Times Earnings”

We have previously intimated that there was a logical theory behind this price-earnings ratio of 10. It revolves about two chief theorems. One is that the man who buys a stock is justified

in receiving a dividend return of six per cent. upon his investment. The other is that, from a conservative standpoint of good corporation accounting, the average corporation should pay out in dividends on its stock in any one year not more than 60 per cent. of its net profits for that year.

The first theory, regarding the six per cent. return, is so old and well-intrenched in investment principles as to need no further proof or backing. There is more room for argument in the second theorem. Many authorities claim that a corporation is justified in paying out much more than 60 per cent. of its net profits. This is largely a matter of personal opinion and good corporation accounting practice, but there appear to be plenty of logical arguments for the conservative theorem.

Logical Basis for the Fundamental Ratio

Any conservative corporation must look to the future. It must be constantly expanding, spending money on research, strengthening its position and laying aside a portion of its income in good years for the possible lean years that may conceivably develop, at least temporarily, in the future. Although it is to some extent an arbitrary figure, a margin of retaining 40 per cent. of net profits for such reserves and expansion purposes does not appear too conservative.

Opponents of this doctrine argue that if such a course is followed the company will, unless it suffers large loss in intervening years, build up a huge profit and loss surplus and that thus the market price of its stock should advance to more than 10 times its earnings. The author maintains, however, that this should not theoretically be the case, and even if it is in practice the stock will advance under such circumstances, but that from this theoretical angle it should advance only in the ratio mentioned, and as the increase in surplus of the corporation increases its earnings and thus, in turn, allows a larger dividend return upon its stock. In no case, however, would such a tendency justify paying out much more than 60 per cent. of total earnings in dividends, from our theoretical standpoint.

The argument that there are plenty of corporations which are already so strong, are increasing their earnings and activities so fast and have such good future prospects that they need not lay up for a rainy day, was an argument quite natural after such a long upswing in stock prices and such a protracted period of corporate prosperity as this country witnessed after the post-war depression and through the early part of 1929. But it is worthy of note that the same arguments might have been, and were, used during the period of war-time prosperity.

The Conservative Basis

No conservative student of past history or present trends can ignore the fact that no matter how rapid a nation's progress, such progress has always in the past been interrupted at various times and in varying degrees by at least intermediate periods of depression and low profits. And no matter how brilliant current prospects appear no corporation seems justified, from a conservative executive standpoint, in neglecting to lay aside an appreciable fund for the contingencies of such an intermediate depression.

If we grant, then, the two main theorems, that the stock owner is entitled to receive a dividend return of six per cent. on his investment and that any corporation, even in prosperous times, should not pay out more than 60 per cent. of its net profits per share per annum on its stock, then the price-earnings ratio of 10 is only a matter of simple arithmetic. If a corporation pays out exactly 60 per cent. of its net profits per share of stock, then that amount will equal six per cent. on a price of 10 times the actual and total per-share earnings.

How It Works Out

For example, let us assume that an average corporation earns \$10 per share on its common stock. From a conservative standpoint it will pay out only 60 per cent. of this amount, or \$6 per share, on its stock. In order that this dividend shall equal six

per cent. on the investment, the stock would have to sell for 100. This selling price would be just 10 times the total earnings of \$10 per share.

If the stock sells for more than 10 times its earnings, then one of two unfavorable situations develops. Either the company pays out more than 60 per cent. of its annual earnings in dividends or else the dividend return to the stock owner falls below six per cent. If our stock, earning \$10 per share, for example, sells at 160, or 16 times its earnings, and pays only 60 per cent. of its total profit, or \$6 per share per annum, in dividends, then the dividend yield on the stock amounts¹ to only 3.7 per cent., which is not a fair yield, from our theoretical standpoint, on the stockholder's investment.

Why 1929 Prices Showed Inflation

On the other hand, if the stock, earning \$10 per share, sells at 160 and pays dividends high enough to give a fair yield of six per cent. on that market or investment price, the corporation will have to pay out \$9.60 per share per annum in dividends, or nearly its entire earnings for that year, in which case the surplus carried over for a rainy day or for expansion would be dangerously low. During the unhealthy inflation of early 1929, many stocks were selling for 30 to 50 times their earnings. Even granting the radical possibility that earnings of such a stock had increased 25 per cent. every year thereafter and had paid out every cent of such earnings in dividends, saving nothing for a rainy day, it would take about five years before the company could pay a dividend to yield six per cent. on such high selling prices.

The price-earnings ratio of 10 is therefore seen to be based upon what appears to be sound logic; namely, that the corporation should not pay out more than 60 per cent. of its profit per share in any one year, and that the investor who buys the stock at its market price is entitled to receive a dividend yield of six per cent. on that price at which he makes his investment.

In our consideration of dividend payments we have seen² that

¹ See Page 413.

² See Chapter XV, p. 348.

from a theoretical standpoint it is earnings, and not dividend payments and dividend yields, that determine the value of a stock. For we have seen that if a dividend is paid, the value and price of the stock drop by just that amount which its value is reduced. Dividends and dividend yields do not matter much, therefore, so far as theoretical value of a stock is concerned. In the final analysis it is earnings, the stuff from which dividends and surplus and growing assets are made, that actually count in valuation on any stock.

The Dividend Yield

In like manner, despite what we have said about the price-earnings ratio, the dividend yield on a stock is not as important as it is generally considered. From a theoretical and trading standpoint it is not important at all. There are plenty of stocks paying no dividends at all but which are selling at comparatively high prices, simply because of earnings or future prospects or other considerations quite apart from dividends or dividend yields. In the case of investment buying, where a return is wanted, then the dividend yield becomes important. But from a more practical standpoint the dividend yield is present whether dividends are being paid or not. They are present in the increased equity and the theoretically increasing market value for the stock, if earnings are retained in the corporation rather than paid out in dividends.

This same theory applies also to our price-earnings ratio example. The true investor would perhaps demand that he receive a dividend return of six per cent. in actual dividends upon his market investment. The trader, or speculator, would not be so concerned with this yield in the present. But the theory would hold none the less, because if the corporation paid no dividends at all, or less than the six per cent. return, theoretically the 60 per cent. of the year's total profits would still accrue to the common stock in increased equities. The theoretical margin of 40 per cent. of the net profits retained for reserves, expansion, etc., would not be changed, whether dividends were being paid

to yield six per cent. on the market price or not, since that 40 per cent. of profits would be used for the intended purpose of tiding the company over lean years, developing new fields, etc., or it would remain in the reserve funds and thus accrue to the stock's asset value just as it would were the other 60 per cent. of profits paid out in dividends.

Proper Attitude Toward Dividends

Thus, so long as the common stockholder is a part owner of the business, sharing in its total net worth, it makes little difference, either theoretically or practically, whether profits are paid out in dividends or retained in the business for credit of the stockholders. We have seen that the investor is more likely to desire a return on his investment. We also know that the average holder is more likely to favor a stock which is paying dividends than one which is not. This is natural and perfectly reasonable. It is especially to be considered when buying on margin, for a margin stock that is paying dividends will help "to carry itself," since the dividends may be applied to the interest being paid on the holder's debit balance with his broker.¹

In general, the dividend paying stock is preferable to one which is not on a dividend basis. The point to be noted, however, is that the public generally places too much stress upon dividends, for they are not nearly so important as other factors, notably earnings.

How to Compute Stock Yields

The yield on a stock is the percentage of the total investment, or market price, which the holder receives in any one year in interest or dividends upon that particular investment. A bond yield is the yield on a bond. A dividend yield is the yield on a stock, arising through the payment of dividends rather than through the payment of interest. The yield on any security is easily arrived at by dividing the dividend by the price. A stock

¹ See Chapter VIII, p. 148.

which sells at 100 and pays \$6 per share gives a dividend yield of \$6, or 600 cents, divided by 100, or six per cent. Likewise, our previous example of the stock which sold at 160 and paid only \$6 per share per annum gave a yield of 600 divided by 160, or a dividend yield of about 3.7 per cent. And the stock which sold at 160 and paid \$9.60 per share per annum gave a dividend yield of 960 divided by 160, or exactly six per cent.¹

The ease with which yields may be computed by mental arithmetic depends upon their dividend and price, as well as upon the mental capacity of the individual and his familiarity with the process. It is apparent that if one pays more than 100 for a stock paying \$6, or six per cent. on the par value of \$100, he will receive less than six per cent. If he pays less than 100 for the stock, he will receive a return of more than six per cent. In other words, since the dividend return on any security is merely the percentage of return, and since percentage implies 100 as a basis, 100 is the base point of departure in figuring yields. That is why 100 is usually set as the "par value" for any stock, although such figure is not necessary and although the same principles of calculating yields apply whether a stock has a par value of 100 or some other figure, or whether it has no par value at all.

Calculation by Yield Tables

If a stock pays any dividend at all and sells at 100 its yield will be the amount of the dividend. If it pays \$3 per share per annum its dividend yield will be three per cent., etc. As the price base advances above 100 the dividend yield declines. As the price base is reduced below 100, so the dividend yield increases. It is easy to figure that if the yield at \$6 per share at 100 is six per cent., the yield at 200 will be only three per cent. and the yield at only 50 will be 12 per cent. Various other combinations are just as simple to calculate in mental arithmetic. By far the majority of such yield problems, however, are not so conveniently solved. For approximate yields, regular

¹ See Page 410.

yield tables are available, one of which will be found in Appendix F, on page 812. For exact yields, not shown in the yield tables, actual division must be done to calculate the true yield.

Price-Earnings Ratio Indexes

Returning to our consideration of price and yield, so much interest and importance has attached to the consideration of the price-earnings ratio that in the past year or so a number of stock market indexes have sprung up with this ratio as their basis. So rapid has been the development of our present "big business," with large consolidations and huge earnings, that it has become apparent that rising profits were at least in large measure responsible for the long advance in stock prices through most of 1929. The question to decide, therefore, was whether stock prices had advanced relatively faster than profits, and thus whether or not the general average of stock prices was still attractive from a buying standpoint or was actually inflated.

It was thus apparent that the ordinary charting of the actual prices for a group of stocks no longer served as a satisfactory basis for market judgment. The index of the ratio of market prices to earnings comes much closer to a rational picture of the situation. Both the National City Bank of New York City and Standard Statistics Company, Inc., have maintained such price-earnings ratio indexes, though the compilation of the latter organization is the more complete. Their charts are shown in Plate 69. The National City index goes back to 1913 but includes only 150 corporation stocks. The Standard Statistics compilation goes back only to 1927 but includes approximately 500 stocks. (See Appendix K, p. 830.)

Both indexes show that the representative list of stocks used was selling for approximately 15 times earnings during most of 1929. At the bottom of the post-war depression in 1918 the National City index shows that its corporation stocks were selling well below 10 times their earnings and for a short period in 1918 they were selling as low as only five times their earnings.

The deflation of late 1929 brought these indexes back down to

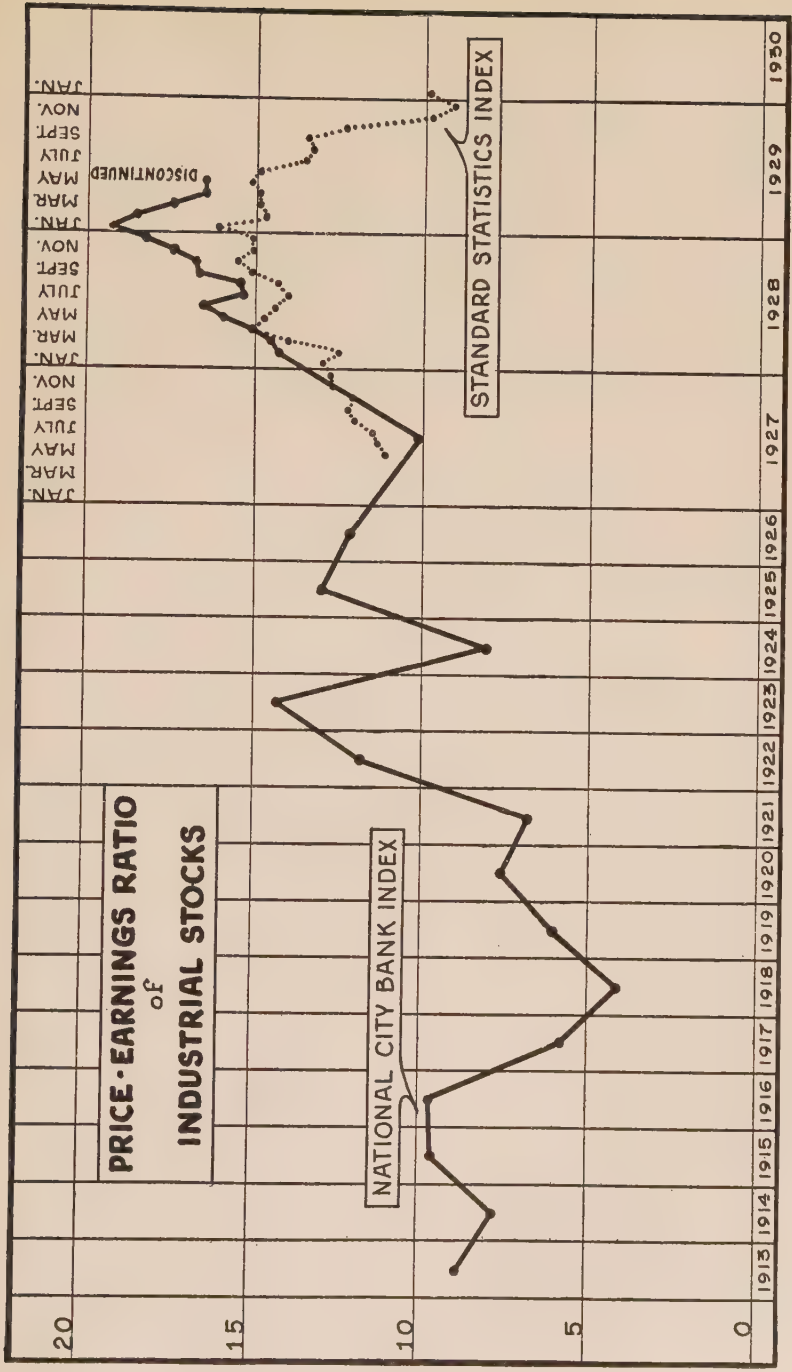


PLATE 69. INDEXES OF PRICE-EARNINGS RATIO

In July, 1929, the Standard index shifted from 1928 to 1929 earnings base. See Appendix K for detailed explanation.

more reasonable levels, and it is significant to note that the Stock Market Panic of that year was stemmed at around our logical base of 10 times earnings. The measure by which the index goes below this figure is probably due to discounting of possible decline in future earning bases, and on this ground we may note that in bear markets the price-earnings ratio may go below the base of 10 just as it goes above it in bull markets.

It is thus apparent from these price-earnings ratio indexes that although profits were advancing rapidly during 1927, 1928 and 1929, the prices of stocks were actually rising faster than earnings and the price-earnings ratio was therefore also advancing. We have previously seen that as the price-earnings ratio advances one of two things, or both, must occur. Either the corporations must increase their relative dividends to keep the dividend return at its previous high level or that dividend return must fall.¹

The Fallacy of Inflation

To some extent both of these things occurred in the recent period under discussion. Higher profits made possible the paying of higher dividends. But in a much larger and more significant measure the increase in such dividends did not keep pace with the increase in the price-earnings ratio. The result was that the dividend yield on the general list of active stocks showed a fairly steady decline, while the ratio of price to earnings was on the advance. Such a movement was at least suggestive of over-speculation and inflation in the market values of stocks.

Once again, however, this indication was only relative. The real barometer still lay in the actual earnings. The advance in the price-earnings ratio was much more significant than the decline in the dividend yield. In point of fact, the earnings limited the increase in dividends and so, once more, the earning status was the decisive factor and the lowered dividend yield was merely a reflection of this underlying earning ratio.

We have referred frequently in the present chapter to this

¹ See Page 410.

underlying fact that earnings are much more important considerations than dividends in judging the attractiveness of any individual stock. There are plenty of examples of a stock which maintains a dividend of a certain stated amount but whose price is gradually on the decline. As the market price for the stock declines, the dividend meanwhile remaining stationary, the dividend yield, of course, increases. The natural reaction of the inexperienced stock trader, therefore, is that this must be a good stock to buy, since it is perhaps paying \$6 per share per annum and is selling for only, let us say, 75, to return a yield of over eight per cent.

In only very isolated cases is such a conclusion justified. Outside factors, almost always earnings or prospects, have entered into the picture, and both of these factors are much more powerful and important ones than the dividend being paid. It is probably the case that the earnings of the stock in question are falling off or are even currently running below the actual \$6 per share per annum dividend payment. The logical assumption is that if earnings are not sufficient to cover dividends the dividend rate will be lowered or entirely suspended.

The decline in the stock is therefore merely reflecting the decline in the company's earnings and is discounting in advance the probability that the dividend will have to be reduced or omitted. And the rising yield, as the market price declines, is merely a testimonial of the growing risk involved in the stock and the growing probability that the dividend will not last much longer.

Dangers of a High Yield

So reliable is this factor of dividend yield that instead of being an attraction the presentation of a high dividend return should always be a danger signal to the potential purchaser of the stock. It does not necessarily mean that the dividend is to be reduced or passed entirely, but it often indicates just that. In any event the high dividend yield almost always indicates that there is some unfavorable factor regarding the stock, which the market price is discounting. The potential purchaser should

satisfy himself that he knows what that factor is before he buys the stock. If he knows the factor, judges it is not important or that it has pushed the stock down too far for its value as a factor, then he is justified in buying the stock.

A case in point is the action of American Woolen preferred stock in 1926, when it became increasingly apparent that earnings were dropping so rapidly that the preferred dividend might have to be passed. Here was a stock which had paid its regular preferred dividend of \$7 per share per annum for over 25 years and was still paying it. Yet the preferred issue dropped steadily from a high of 102 in 1924 to below 70 in 1926. At that time it was offering a dividend yield of over 10 per cent. To the uninitiated this appeared attractive. Once more, however, earnings were more important than dividends. Earnings continued to decline and the preferred dividend was passed in the summer of 1927, after which the stock gradually declined still further.

The fact that a stock is giving a high yield may indicate that the dividend is in danger, but it does not necessarily promise that it will be passed. It is up to the individual buyer to decide that. There is the preferred stock of Armour & Company of Illinois, for instance. The company's earnings have not been very favorable in recent years and there are admitted possibilities that the dividend may be passed. Meanwhile, however, the stock has sold as low as 75 for several years past while the regular dividend of \$7 per share was continued. The stock gave a yield of nearly nine per cent., but this was due wholly to the always present possibility that the payment would be suspended.

Until such time as public confidence is restored in continuation of the dividend, the stock will continue to offer a high yield. The old law of supply and demand is illustrated by the fact that if the dividend is not to be passed the first persons whose confidence is re-established will buy the stock for its high yield, and as more and more persons come to the same conclusion, its price will advance under such buying until it is back on its old secure dividend return of less than seven per cent.

Insecurity of dividend is the chief factor, therefore, making toward high dividend yields. That insecurity may be brought

about in many ways, all of them, however, bearing either directly or indirectly on earnings. The new, the small, the untried, the unknown corporation, whose profits are not secure, is likely to have its stocks sell at prices which give high dividend returns. The high returns are merely the purchaser's reward for accepting a greater degree of risk.

The important thing to be stressed with regard to dividends is that in themselves they do not matter much. It is earnings that really count in making the stock attractive. And far from being a recommendation, the high dividend yield is generally a warning for the potential investor to look around for the "nigger in the woodpile."

Discounting Insecure Dividends

A case in point is American Telegraph & Cable Company stock, which sold on the New York Stock Exchange in the fall of 1929 for around 17 and paid a regular dividend of \$5 per share per annum. The dividend yield was therefore around 30 per cent. The dividend is almost guaranteed by a contract with Western Union for the transatlantic cable which it leases from this company at just sufficient rental to pay this dividend. The author receives quite regularly letters asking why this stock is not a good buy. On the face of the situation it looks like an attractive purchase. But the high yield indicates a decided defect.

That defect lies in the fact that the lease of its cable to Western Union expires in 1934. The cable is the only large asset of the company. It was one of the first transatlantic cables laid and is probably out-of-date, and the lease will perhaps not be renewed by Western Union, certainly not at the previous rates. An offer of Western Union late in 1929 to buy the stock at \$27 per share resulted in the market value recovering and being practically "pegged" at that price. But otherwise the situation remains the same. Until 1932 the stock will almost unquestionably continue to pay its regular dividend, yielding the attractive return of 18 per cent. But after 1932 the dividend,

the earnings, the asset value of the stock, all are problematical, to say nothing of being dubious.

The important lesson to be drawn is that stocks do not as a rule sell very far out of line with popular appraisal of their values. Before the buyer concludes that a stock is cheap he should find out the reason, if any, why others have not also found it cheap and bid it up. There may be no true reason, except that the individual has been more observing than the public. Unfortunately, however, in most cases it will be found that there are definite reasons for the low selling price and the possibly high resultant dividend yield.

We have now considered such factors as the corporation's business, its assets, profits and dividend yield of the stock, in connection with the market price for the individual issue, in making our decision as to whether or not the stock presents an attractive purchase. Plate 70 is a graphic presentation of some of these more important factors in the analysis of individual stocks.¹ Another important factor entering into the picture is the corporation's management. This is another of the indefinite factors which cannot be measured in numbers or figures and is therefore largely comparative in degree.

Importance of a Proper Market

Another factor to consider in gauging the attractiveness of individual stocks is the market for such stocks. For long-pull holding or for pure investment it does not matter much what kind of a market a stock has, but for the short-term type of trading and for speculation the better vehicle will be the stock with a wide and ready market and one which the public is familiar with and likes to trade in. In nearly all cases, too, the most attractive stock will be one in which there is plenty of publicity, of a general nature as well as regards issuance of regular financial statements. Such publicity can, of course, be overdone, as in a case where unwarranted publicity has pushed the price of a stock above its fair value. But where the element of publicity is used

¹ See also Chapter XXIII.

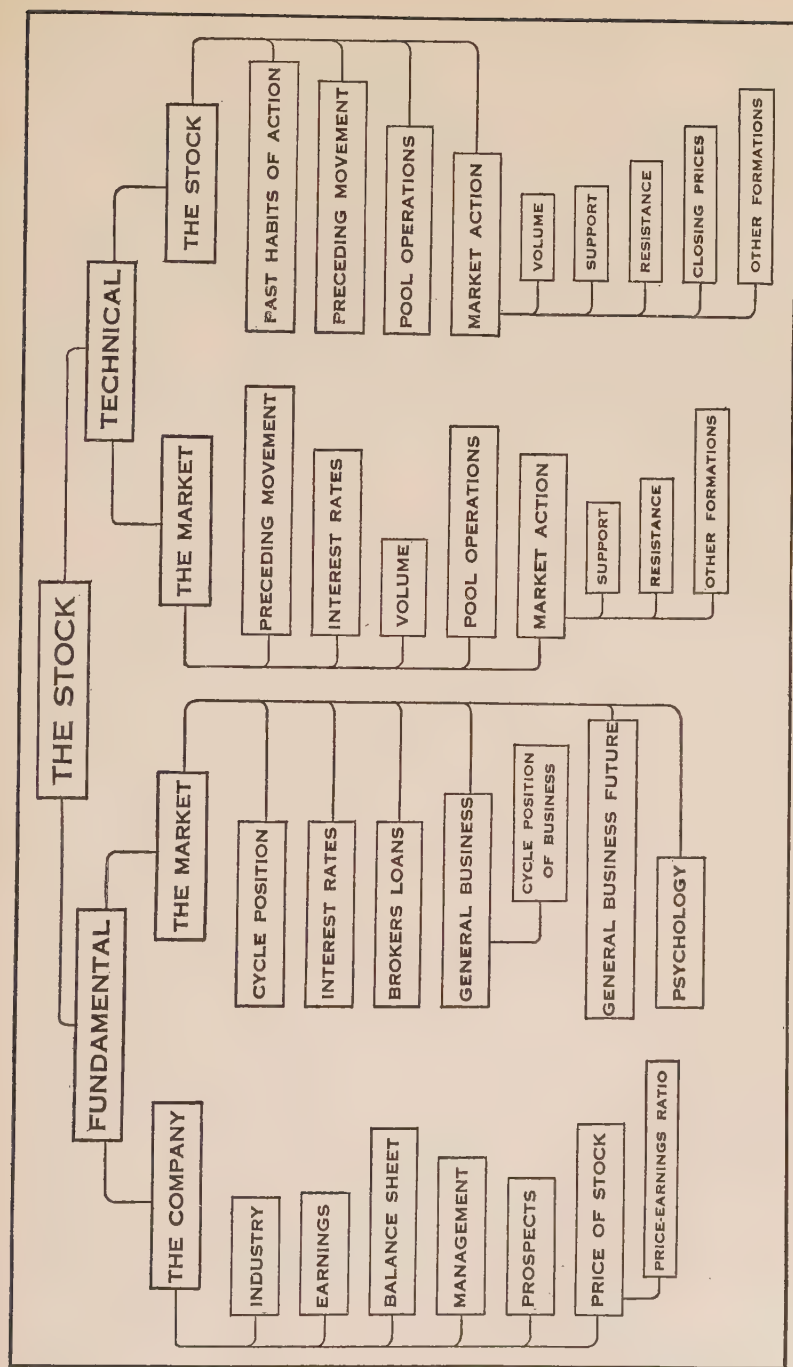


PLATE 70. GRAPHIC FORM OF STOCK ANALYSIS

Sample method for consideration of factors influencing the future market of a stock.

reasonably and legitimately it constitutes a measure of attraction for the stock.

The stock whose market is under theoretical pool control or manipulation is often a more attractive stock to trade in for the short-turn, though this is by no means a rule and in such case the attraction of the stock depends upon whether the pool is intent upon accumulation or distribution. We shall study such methods in greater detail in a later chapter,¹ but we now note merely that for the short-turn and for speculative operations much more rapid market action is obtained in a stock under pool control than in one which is left to shift for itself without such artificial stimulus.

Gauging a Stock's Future Prospects

One final element of consideration in the attractiveness of individual stocks is the future prospects for the company. It is hardly necessary to point out the importance of such a factor, since we have learned that the attraction in a stock is its probability of price appreciation, that this depends upon appreciation of profits, and these, of course, depend upon the favorable outlook for the company and its earnings in the future. We have discussed this matter in some degree at the beginning of our discussion under the consideration of the company's business.²

We need not dwell long, therefore, upon the importance of selecting a stock with favorable future prospects, since the arguments are self-evident. The factor is most important in long-pull trading and in investment. In short-term trading and speculation a stock may prove attractive even in spite of only moderately favorable prospects, or even in the face of unfavorable prospects, due merely to its strong technical position, such as the existence of a large short interest which may be "run in" and forced to cover, or to the fact that the stock has been driven downward entirely too rapidly and is due for a short, sharp intermediate recovery.

¹ See Chapter XXIII.

² See Chapter XVI, p. 373.

The Element of Imagination in Prospects

As a sidelight on the future prospects of a stock and its company it is often profitable to select one in which the imagination may be given comparatively greater rein. Other things being equal, a stock connected with an entirely new field, resulting from some new scientific invention, rapidly changing tastes or public demands, or a stock in which there is as yet no great amount of competition and in whose field the potentialities for the future are great, or preferably infinite, is an attractive stock to hold.

This statement applies chiefly to the stock before its real advance has begun, for it is almost certain that when such potentially great prospects are realized by the public at large, the price of the issue will soar rapidly to levels far above its current earnings and probably far above any prices logically justified by true prospects for many years to come. This type of stock is liable, therefore, to inflation and to over-speculation, and therefore to eventual rapid decline. It is thus a more volatile and dangerous type with which to deal, but it is a type capable of producing large and rapid profits if purchased at the right time — before the public's imagination has been fired.

The stocks resulting from practically all of our recent important modern inventions fall into this classification, including the automobile, the automatic oil-burning furnace, the electrical refrigerator, the radio, the sound motion picture, the television devices and countless others of less importance.

Stocks Based on New Inventions

It should be valuable to become familiar with the normal action of such new industries and their stocks, since past history shows that they have all pursued more or less similar courses. That history is somewhat as follows. The companies involved in the new invention or the new development may have been struggling along to perfect it for many years without much success until the final victory, or they may be companies that have jumped in at the timely moment to reap the benefits of the new

development. Both types will generally share in the market advances, but the former will usually be much the stronger companies, therefore have the stronger stocks, since they have a better background, longer seasoning and are better grounded in the new industry.

In any case, all of the stocks will advance rapidly for perhaps six months to a year or more as the new invention is further developed, gains prominence and the general public begins to realize its tremendous potentialities. The result is a scramble for the stocks of such companies and resulting inflation of their true values at just about the time when the original burst of enthusiasm in the industry itself is giving way to realization of over-expansion, various drawbacks which are bound to appear after a period of practical experimentation, the cost of additional research, the advent of more detailed inventions and further refinements and, finally, the rapid growth of a helter-skelter but none the less cut-throat competition.

Normal Course for Stocks of New Inventions

The result of such factors, coming at the peak of inflation in the stocks themselves, leads generally to a more or less serious intermediate depression which may last anywhere from six months to a couple of years. During this period probably most of the losses are taken, and they can be tremendous. It is during this period of seasoning and general depression in the new industry that the foundation for its real growth in the future is laid. In this period the weak sisters, the poorly managed companies, the concerns organized merely to take advantage of the public enthusiasm over the new invention, those organized merely as stock promotions, and all the "deadwood" concerns, gradually drop off, go definitely to the wall, go through long and expensive reorganizations at great losses to their stockholders or are merged with or bought up by the stronger members of the industry.

Gradually, then, the fittest survive, and as the weak competition is reduced through this painful but necessary process, the industry again begins to point upward. Provided that it repre-

sents a real value and fills a true economic need, the industry is now on its way to real and lasting prosperity and in a few more years it has taken its place as one of the nation's important industrial classifications.

There are various individual aspects of this story, plenty of departures from the strict rule and individual specifications. But, by and large, the story told above has been repeated often enough in the past century, as regards both the industry and its securities, to have taken on the form of a true classic. The logic of the repeated history is plain; it results from economic laws that do not change much from generation to generation, and it seems probable that the same story may be repeated many more times in the coming years, as one new invention and one new scientific development after another fires the imagination of the public mind.

The lesson is not so simple as it might seem, however. Broadly, it may be pointed out that in the case of such a new invention there are two distinct periods or zones when buying of the stocks is justified and generally yields good profits. The first period is at the very beginning, before the stocks have advanced very much and before the public has realized the potentialities and rushed in to buy. The man who "gets in on the ground floor" in this manner need not worry tremendously about getting out at the top of the initial inflation. It is best for him, naturally, to at least lighten his holdings and take partial profits at such time, but he might safely retain a good share, or even all, of his original commitments, provided they are in the strong companies which will last through the coming depression and on into the permanent period of growth and prosperity. For if he has bought them at their early stages it is very doubtful, as a rule, whether they will ever get back to the price he originally paid, even in the coming depression.

The second buying period, however, is during the bleak, black days of the industry's depression, when the "little boys" are going to the wall, when profits are scarce, losses large and the future looks dark and dreary. If the industry represents a real economic advance and a popular necessity, then that is the time to invest

in the new industry for long-pull appreciation. This time the advance is slower, without the impetus of popular acclaim and enthusiastic excitement. It is laid on a broader and more durable base, and for that reason the advance will be a reliable and more or less stable one.

CHAPTER XVIII

SOURCES OF STOCK INFORMATION

Importance of Information in Stock Analysis

In previous chapters we have had considerable to say about basic principles of analysis and the importance of investigating such factors as the business, asset values, earnings, prospects, etc., for any individual stock, before coming to one's trading decision. This process of personal analysis is merely the utilization of facts in deciding the comparative attraction of various security issues. A knowledge of how to use the facts available regarding any stock is necessary to its analysis, even in only a general way. But it is just as apparent that the potential investor must know where to get the facts regarding any stock before he can deal with those facts in a rational and analytical manner.

Stock analysis is generally considered to include the correct procedure in dealing with facts regarding any stock and determining from such information the comparative possibilities inherent in the issue. In a larger sense, however, security analysis consists also of knowing where to obtain the facts that are most important in such analysis.

The potential investor may be thoroughly familiar with the general considerations which make a security attractive. But if he does not know how or where to obtain information regarding securities his theoretical knowledge goes for naught.

There are many sources of information regarding securities. So decisive has become the public demand, especially in recent years, that a large number of new sources of information, some good and some not so good, have sprung up. In general, it remains true, however, that the older sources of information are the more reliable and the more reputable.

In the final analysis, most of the information regarding any security emanates originally from the company itself which puts

out the security. Such reports are usually sent only to stockholders and to statistical agencies. Sometimes they are not even sent to the latter, but the best of these agencies make it their business to collect, index and file this information, whether it comes direct to them from the official sources or not. If the information does not come direct, the best agencies will, of course, be careful to verify the accuracy of their information before they include it in their files.

Three Chief Sources of Information

The newspapers, financial publications and statistical information bureaus constitute the three chief sources of corporate and security information. We have seen that they get much of their news directly from the corporations. There is, nevertheless, a considerable amount of information that has a definite bearing on any one corporation or its stocks but which does not emanate directly from the company. The quality of the informative medium is tested in securing and presenting such indirect information, verifying it and getting it to the public while it is still fresh and useful. The better and larger information sources have generally the better facilities for collecting such indirect information. They are the first to publish it, and the bureaus of lesser quality and character generally "lift" the information and publish it, also, though somewhat later.

It is unnecessary to go into a technical study and description of the intricate news-gathering systems of some of the larger and better statistical bureaus. Suffice it to say that they spend thousands of dollars in the collection of perhaps only one bit of news, provided it is important news. Their reputation depends not merely upon the completeness of such information, but also upon its accuracy and upon presenting it to their subscribers before it becomes common knowledge. Such bureaus maintain large and separate staffs of financial news reporters who are continually striving to obtain valuable information before it is generally known in the financial district.

The efforts of such bureaus to "beat" their competing services

on a piece of important news are linked up more closely with short-term speculation than with investment. The average amateur analyst will be more interested in facts about capitalization and figures on earnings which his bureau can collect more leisurely than he will be in getting the first news of some "tip" which may exert a sharp and sudden effect upon an individual stock or group of stocks. In a general way, however, the news-gathering bureau is also in the business of presenting these more permanent tools for analysis, and it is a fairly good rule that if a bureau excels in speed, completeness and accuracy in gathering current news, or gossip, it will also excel in presenting the more permanent statistics and records on securities in general.

To a more specialized degree the news-gathering service is separate from the statistical information bureau. Many firms are in both fields and excel in them both, but there is still a divergence in their aims and in most cases the two activities are handled by different services. The news-gathering service generally specializes in just that, from the standpoint of financial and security information, and makes no special effort to present a cumulative and organized picture of any one company or situation.

Statistical Information

The statistical information bureau takes care of these last duties. It collects its information from all possible sources, being careful to check the quality of the source and the accuracy of the information. Information which comes direct from the corporation is termed "official information." Where a statistical bureau picks up its information from other sources it is generally termed "unofficial information" or merely labelled a report. Most such services try to quote their authority for such a report. These services get most of their unofficial reports from the news-gathering organizations. Their chief difference from the latter lies in the fact that they check, codify, index and present in compact and convenient form all of the news they have been able to find, and generally group such items together in a general de-

scription and tabulated report on each individual security or corporation to which the news may have reference.

As the reader may easily guess, the newspapers are the chief news-gathering sources. They are supplemented, especially in the New York district, by a very important and specialized form of newspaper, called the ticker bureau. The ticker bureaus collect their information much as do the newspapers, but they specialize somewhat more keenly in getting the financial news first and transporting it to their readers at the earliest possible moment. This is accomplished through the use of a specialized type of machine called the news ticker.

The News Ticker

The news ticker operates electrically on somewhat the same principle as the stock ticker. The news ticker agencies rent their tickers to subscribers. As the news is received at the main editorial office it is printed on this master machine and automatically and simultaneously is printed on each of the agency's subscription machines located not only in offices throughout the New York district but in the larger cities throughout the entire country.

The news ticker amounts, therefore, to a continuous series of telegraphic messages which print the current news throughout the entire day, approximately from 9 A.M. to 4 P.M. and after. The news ticker service is rightly considered the ultimate modern achievement in rapidity of news distribution, since there is a minimum of delay in transmitting the news from the central agency to the potential reader.

There are in New York two chief news ticker agencies, the Dow-Jones agency and the New York News Bureau agency. Their subscribers for the ticker service are almost entirely the various brokerage offices not only in the New York district but in other cities to which they are constantly extending the convenience of their service. Both of these ticker agencies also operate regular financial newspapers in which appear the various items of news printed during the day on the news ticker, to-

gether, of course, with other financial news items and comment not urgent enough to be sent out over the electric ticker system. The Dow-Jones agency publishes the *Wall Street Journal*, while the New York News Bureau publishes the *Wall Street News*.

The Newspapers

Besides these two premier financial newspapers in the New York district, there are a number of others, including a comparatively new one put out in tabloid form and apparently for more popular consumption. The *Wall Street Journal* is generally considered the primary New York daily newspaper devoting itself to the presentation of business and financial news. The *Journal of Commerce* is another New York daily newspaper of high standing which publishes financial news, but it is not so specialized as the others, since it covers the entire field of business, and commodity, insurance and various other commercial and financial lines.

Then there are the regular New York daily newspapers, all of which include in their regular editions a financial section devoted to security market records and general financial news. Among those having what are judged the better financial sections are the *Times* and *Tribune*, in the morning, and the *Sun* and *Post* in the evening.

Every large city has its own local newspapers presenting more or less full and accurate financial information. Unfortunately, there are still a great many of such cosmopolitan newspapers which have not brought the completeness and accuracy of their financial sections up to a satisfactory standard. Generally there is one paper, at least, which pays more attention to financial news than do the others, and the potential investor, learning this from experience, will naturally want to patronize the local newspaper which has the best financial section, not so much for local financial news as for reporting the chief New York markets, for, despite the rapid growth of stock markets in other large American cities, the New York security markets still exercise the most important influence.

Selecting the Newspaper

We have observed that there is still an unfortunate laxity on the part of many newspapers shown in their presenting inadequate or inaccurate reports of New York market trading and general financial information. Completeness of such information is essential but accuracy is just as essential. The reader must decide for himself whether he can safely risk depending upon his own local newspaper for his financial news. If he feels that the information contained in its financial section is incomplete or inaccurate, then he should by all means subscribe for one of the better New York publications. Even though such daily New York newspapers are sent him by mail, reaching him several days late, they are much more valuable to the investor than his own local paper if the latter is incomplete or inaccurate.

The daily financial newspaper serves a very definite purpose in maintaining a proper background for any sort of organized investment or security trading program. Its value, however, lies chiefly in presenting complete and accurate record of statistics on daily trading in the chief securities. It may also lay the foundation for personal analysis of securities and individual corporations, but in a much larger sense this latter object is the chief aim of the statistical information bureaus.

We have previously seen that the newspaper collects the news in current fashion and presents it thus. But no cumulative record is presented showing the whole category of information on any particular security or corporation. This is the function of the statistical information bureau. It collects the current news from the news-gathering publications and agencies, from the corporations themselves and from all other possible sources, and organizes such news under the heading of each individual corporation or security to which such news refers.

The Statistical Bureau

The statistical bureau, therefore, offers a service in which are presented complete descriptions of all important, and even many

unimportant, corporations, with facts and figures regarding capitalization, past and current earnings, dividends, price records and all other facts and factors connected with this company of a descriptive or statistical nature which might be of use in analyzing the security of the company or its future prospects. The statistical information bureau is the most dependable and most important adjunct, therefore, to collecting the facts for use in the analysis of any corporation or its securities.

It must be perfectly apparent that any organization maintaining such a full service and doing it completely and accurately must have a large staff, a large series of publications and a generally large organization. So specialized is this field, and so large the necessary investment in such an organization, that there are not more than a dozen well-known concerns in this business.

As a matter of fact, there is not a great deal of difference between the four or five foremost companies in this field. They are all complete, reliable and accurate and are constantly improving and enlarging their services. The better-known organizations in the field of dispensing organized statistical information on corporations and their securities include Standard Statistics Company, Inc., Moody's, and Poor's. All three of these services are located in New York City. Their subscription prices are rather high for the average individual, and he will probably find it almost as convenient, and certainly cheaper, to take advantage of his broker's subscription to such a service instead of buying it himself. Practically every brokerage office and large public library subscribes to one or more of these statistical information services and the average broker does not mind allowing its occasional use by a good client.

We say the "occasional use" advisedly, since it is manifestly unreasonable to ask one's broker to allow constant use of such service, unless one's account and trading are especially large. Due to the high cost and the professional character of such services, therefore, they are not generally used by the individual. It is much cheaper, and almost as satisfactory, for the average stock market operator to write to some stock information bureau for a description or analysis of the security in which he is in-

terested. The stock information bureau will undoubtedly be a subscriber to several, if not all, of the expensive statistical services and will give the inquirer the benefit of the best points contained in each service, as well as a reply presenting composite statistical reports and an analysis of the security required, based on such composite information and thus of a very high and accurate caliber.

Financial Periodicals

Occupying somewhat of a middle ground between the news-gathering organizations and the statistical information bureau sources are a fairly large group of periodicals which specialize more or less in attention to financial and security matters. Some of these confine their chief attention to the security markets, like the *Financial World* and *Magazine of Wall Street*; others cover more of the entire financial field, like Barron's, the *Annalist* and the *Commercial & Financial Chronicle*, more commonly known as the "*Chronicle*"; still others pay greater attention to general business but also include specialized departments dealing with securities, like the *Magazine of Business, Commerce & Finance*, and *Forbes*. Most of the above-mentioned periodicals are issued either weekly or semi-monthly, and are published in New York.

The purely financial magazines like the *Annalist* and *Chronicle*, both published weekly, deal largely with actual and current statistics. The other periodicals mentioned combine current news and statistics with past history, corporation record, and fuller analysis and recommendation regarding the security markets in general and the individual security issues themselves.

The Market Advisory Service

We now come to the more specialized field of the service whose main purpose is giving advice and recommendations for market investment and trading. These organizations are usually called security market services. They may go in for very detailed or only sketchy analysis and statistical history, but whatever degree

of analysis they give is merely to back up their chief purpose, which is the recommendation of particular action with regard to their subscribers' market positions. Some of such services make no attempt to give reasons, present analysis or justify in any logical way the advice they give. All of them, however, are organized for the purpose of advising their subscribers of the most advantageous and profitable trades to be made in the security markets.

It is in this field of market service that the greatest numerical growth has taken place in recent years. During the recent wave of speculative enthusiasm, with spectacular advances and spectacular profits being talked of throughout the country, there has grown a rapid demand for investment and speculative advice on the part of a public which has been for the most part unversed and inexperienced in the art of security analysis, to say nothing of security trading.

Thousands of individuals who have never "played the market" before, who have accumulated savings and heard of the huge profits made in the buying (and selling) of stocks, have been glad to pay for advice regarding the securities to buy and the definite steps to be taken in getting their share of the "easy stock market profits." They have paid for such advice because it came presumably from authoritative sources, from some person or organization with long experience and superior judgment in stock market trading. Unfortunately, many such sources have misrepresented their qualifications and have taken the public's money for poor advice instead of good advice.

Mushroom Growth of Tipping Services

The above paragraph discloses the active demand for such market services. The supply has been just as prolific and even more so. There are plenty of individuals who have had considerable experience in Wall Street and who consider themselves qualified to issue advice on the stock market, whether their own private trading activities in the past have been successful or not. It takes a very small initial outlay of capital to rent a small office,

perhaps a corner of some brokerage house office, have stationery printed, buy a multigraph machine and write a stock market advisory letter at the close of each day's trading. After perhaps 25 or 30 regular subscribers to such a service have been garnered, then the rest is "pure gravy," for overhead of such a market service does not increase nearly as fast as does income from a growing subscription list.

The growth of such market services during the recent years of the long bull market in stocks has, therefore, been spectacular. The author does not mean to minimize the services rendered by the better organizations. Even only fair advice to the neophyte on the stock market is better than blind selection of stocks or buying on speculative tips.

Naturally, however, with the rapid growth of such services there have sprung up many unreliable ones, to say nothing of a tremendous number which have flourished more on the generally rising trend of prices in recent years than they have on the quality of their specific advice. During the period when prices for stocks in general were in their broad general advance and the "bull market" was in full swing, it took no very great amount of genius for such a market service to "make money for its subscribers." Since during the more flourishing days of a bull market perhaps six out of 10 stocks on the Exchange would end the week, or the month, with a gain, it is not surprising that most services were able to "point with pride" to the record of profits made by their previous recommendations. The fact of the matter was that just about any stock, with reasonably good prospects, which they recommended would be likely to show an advance in market price over the course of a few weeks or months.

Testing the Market Service

The test of the genius and true service of such market organizations comes when the market no longer pursues its general upward course, when it grows very selective, when over-boomed stocks are deflated, when market declines make traders look a little more carefully at the actual asset value, the earnings and

the true worth of their holdings, instead of at the rapid advance taking place in any stock, or at the announcement of a "red-hot tip" on some speculative issue. It is notoriously true, and quite logical, that such services flourish generally during a bull market, and subside, folding their tents like the Arabs, when prices go into a long and general decline. The reasons for this are obvious. The public, especially the uninitiated speculator and the inexperienced trader, is interested in the market only when it can make profits by buying a stock.

The average market service, therefore, has much more to gain by taking a bullish than a bearish point of view, and almost always advises purchase, rather than sale, of stocks. The result is that when the market goes into a prolonged decline the subscribers are tied up with a long list of stocks which they should have sold long since. Their capital is tied up until such time as the general market may recover. Meanwhile, they have no more money to put in, have lost their previous enthusiasm, lose interest in the market, decide to "hold on" for better weather, and gradually cancel their subscriptions, either through disillusionment with the "genius" who was to help them make their fortune or through sheer ennui. The rapid demise of many of these organizations since the Stock Market Panic of 1929 has not been surprising.

A List of High Grade Services

It would be manifestly impossible to present here more than a small portion of the list of such market services. Happily, however, our somewhat derogatory remarks about the general field do not apply to all examples. There are perhaps 15 or 20 of such stock market advisory services which have built their houses upon firm foundations, have established large statistical and analytical staffs, have made their organizations permanent and have looked far enough into the future to realize the necessity for advising the sale of securities, when the time seems ripe, as well as their purchase. They have thus, when successful, been able to hold their subscribers through bear markets as well as bull

markets. They have built up strong clienteles of wealthy and financially responsible subscribers, who look to such services for general guidance, specific recommendation and even for actual independent management of their individual trading accounts. Some of these services provide for the handling of large individual accounts on a discretionary basis, which method of trading we have previously observed.¹

Among the 15 or 20 stock market advisory services which stand out as the more reputable, more reliable and more permanent organizations in the field, might be included such concerns as the following:

Babson Statistical Service	Brookmire Economic Service
Moody's Investors' Service	Wetsel Market Bureau
American Institute of Finance	McNeel's Financial Service
Van Strum Financial Service	Whitney Market Service
Tillman Survey	Investment Research Bureau

All of these market services appear to be doing satisfactory and conscientious work. They are not always right. No service, any more than any individual, can be absolutely infallible in judging anything as indefinite as the future course of security prices. But it is generally considered that any individual or agency who can "hit the market" right seven times out of 10, or an average of 70 per cent., over a long period of time, is maintaining a very good batting average.

A word might be said for the uninitiated regarding the responsibility of such market services. As should be perfectly apparent to the experienced market operator, such advisory services can take absolutely no responsibility for their recommendations or for any losses that may be sustained by subscribers through following their advice. It would be manifestly impossible for these organizations to make any such arrangement, even were it advisable from a theoretical or moral standpoint, which it assuredly is not.

Yet the author receives quite regularly letters of stinging ac-

¹ See Chapter XII, p. 285.

cusation and bitter condemnation from inexperienced traders who have suffered loss through following the market advice of such services. In many cases the letters are pitiful when the writer has had particularly hard luck in following just the small portion of total advice given which has turned out to be entirely wrong. It is hard to make such bitter individuals realize that they were totally unfit for stock market speculation in the first place, that they were totally unjustified in risking so much of their capital and, finally, that they are totally unjustified in blaming the market service directly and entirely for their losses and expecting such services to make good the losses they have personally sustained.

Cranks and Market Bureau Responsibility

These individuals, like their letters, come under the heading of stock market "cranks," a heading which is far from unknown to the average market analyst. They are a pitiful lot on the whole, and one cannot help but sympathize with their disastrous losses and their often straitened circumstances. Even the more normal, broad-minded and experienced trader, however, can learn something from such extreme cases. He can learn to look far enough ahead before he undertakes any stock market commitment, to make certain that he can afford to lose without undue strain the greatest loss probable in connection with his venture. If the possible loss is too great, then he should either refrain from his commitment entirely or he should cut down his risk by trading in a smaller quantity of stock.¹

One other source of information and advice is the brokerage letter or the market advice regularly issued by brokerage houses. Almost any broker or any commission house, large or small, we have seen, is willing to give advice when such advice is solicited by the customer.² In the case of the larger commission houses, especially those in New York City, such requests for advice have become so frequent and regular that it would take the time of many customers' men merely to attend to such requests.

¹ See Chapter XXII, p. 552.

² See Chapter XII, p. 247.

The Brokerage House Market Letter

Many of the larger brokerage houses, therefore, have met the demand for such advice by issuing regular market letters each day of trading. In this way they minimize the demands for individual advice or special recommendation, abrogate the possibility of complaint that partiality is shown in the giving of such advice and, incidentally, build up considerable good-will and favorable publicity for their firm through the medium of this regular statement.

The average market letter of a brokerage house occupies only one page of typewritten copy, is generally mimeographed or printed and is written at the close of each day's trading by the statistician or market analyst of the commission house. The letter is somewhat similar to the regular reports of the market advisory organizations, though it is not so long, complete or detailed. It consists generally of an opening paragraph reviewing the previous day's action and indicating the prophecy of the next day's market action. This is followed by individual recommendations on the market. Such letters are usually mailed out gratis to all customers of the issuing brokerage house, and in many cases to individuals who request that they receive the letter, whether they happen currently to be active customers or not. The theory here is that if the market letter is satisfactory it wins a potential customer for the issuing house.

Boosting Pet Stocks

There is plenty of opportunity, of course, for the commission house to boost its own pet issues in such letters. It must be admitted that this is often done and even by some of the larger and more reputable houses. Such tactics are not so culpable as they appear at first, however, since the brokerage house would not have interested itself in any specific issue unless the prospects were good and the house thought the stock a satisfactory medium. In all there are perhaps 50 or more of such market letters issued by New York brokerage houses. They all tend more toward plain

recommendation than full analysis. Some are better than others but none of them are infallible, by any means, and none are to be trusted too blindly.

There are various instances, especially in the case of very large commission houses, where such market letters have a tremendously powerful effect upon the market at various special times. If the writer of such a market letter is known to have sound judgment he often works up a larger and larger following until he may control enough buying power, through his recommendations, to make a stock do approximately what he predicts. If he recommends purchase of a certain closely held stock, therefore, a sufficient amount of buying may be engendered to put the stock up and fulfill his predictions almost immediately.

Such a situation does not usually last very long, however, for when the "professionals" find such a state of affairs they will take an opposite position from that advised, if it is not too dangerous, and double-cross the people who follow the advice of the popular market letter writer. After this has happened a few times, and his readers have been fleeced in recommended trades, they begin to lose confidence and cease following his advice, and such advice thereupon loses its immediate effect upon the market.

We have said that most of these brokerage house market letters do not indulge over much in analysis but are usually content merely with definite recommendation and advice. This is true, but the larger brokerage houses are almost constantly issuing free and separate supplements to such regular daily letters, in which they publish a full and exhaustive circular or analysis on some individual security which they advise their clients to buy. Coming from large and reputable houses with a capable statistical staff, these analyses are generally complete and reliable and constitute another, though a minor, source of investment information.

The Tipster Sheet

The popularity of stock market advisory letters, both from brokerage houses and from reputable market services, has served

to bring into being a bastard type of market letter, which purports to be just as reputable as its legitimate brothers but in reality is nothing but a blind for the exploitation of unsuspecting readers and for the recommendation of semi-worthless, or at least very dubious, promotions. This form of market letter, issued generally by the fake stock promoter, is called a "tipster sheet." A general rule and a safe one is for the potential trader to pay no attention to any market letters unless they are issued by high class brokerage houses, bankers or legitimate market services.

We have previously touched upon the service of regular stock information bureaus maintained by various organizations. In the final analysis, these are perhaps the most important sources of information on securities. Certainly, they are the most convenient sources. These bureaus are maintained by practically all of the various specialized information sources which we have previously considered in this chapter. The regular newspapers, as well as the financial newspapers, the business magazines as well as the strictly financial magazines, the brokerage houses, the market services and the straight statistical organizations — almost all of them have separate departments which make a business of answering inquiries from their readers or clients on individual security issues and individual corporations.

These bureaus are maintained for the convenience of the patrons who do not have the necessary sources of direct information on securities which we have named, do not wish to take time to look up such sources, do not have the analytical background for making their own studies and drawing their own conclusions or who, for any one of a multitude of reasons, prefer to have their analyses prepared for them in advance and fed to them, as it were, on a silver platter.

Importance of the Stock Information Bureau

These information bureaus are probably the most popular and the most important of all public sources of security information. In the strictest sense of the term, they are not the originating points of such information. They are rather the clearing house

for such information. They have access not merely to the direct sources of information of the organization with which they are affiliated, but they almost always subscribe to or have at hand most of the other reputable and direct information sources and services. Instead of an individual going to the trouble of looking up and obtaining for himself, therefore, all these various individual sources, it is a considerable saving of time and money, to say nothing of an added convenience, to make his inquiry direct to one of these information bureaus.

Such bureaus may be large or small, according to the popularity of the particular service and to the volume of inquiries received. The staffs vary from one individual to dozens of analysts, who are constantly looking up all the available information on a particular security, gathering the best from all sources, organizing it in readable form, checking it if necessary, and then retailing it to the individual who has requested the report. In nearly all cases such information bureaus are willing to analyze the information presented as well, merely giving such facts as are available and will hazard opinion and advice if the inquirer requests it.

These bureaus thus occupy a sort of middle ground between the direct sources of financial information and the consumer. They are a sort of middleman. If the individual likes he may go to his direct sources, and if he knows the ropes and knows how to shop it is a more satisfactory and more satisfying method. On the other hand, if the individual does not wish to take the time and energy to go direct to the basic sources, then he may apply to the "middleman" of stock information, the information bureau.

There is no possible question or doubt of the definite economic service rendered by such information bureaus. Their importance deserves more space and attention than they shall here receive, for there is nothing very mysterious about them. So far as the facts are concerned, the bureaus collect them and retail them, all done up in a bundle with the name of the particular stock to which they refer embroidered on the outside. The question of analysis and recommendation is more important and more varied, of course. The quality of such advice and analysis depends upon

the caliber of the organization behind the bureau and on the individual genius of the bureau's manager or members. What we have stressed previously applies once more to the various information bureaus — patronize only those whose good reputation is definitely established and well known.

Inquiry Departments of Periodicals

Many magazines, newspapers and periodicals, which do not pretend to devote much space to a regular financial section, maintain such stock information bureaus as an added service to their readers and subscribers. Many of such bureaus give their analyses free to subscribers, but the expense incurred in such cases often limits their capacity and dependability. Other bureaus make a nominal charge, in which case the analysis and advice is likely to be somewhat fuller, more complete and of a generally higher character.

The National Better Business Bureau has published a partial list of such reliable information bureaus, from which individuals may obtain information and advice on securities or financial matters. The list is presented herewith, with the added statement that practically all of the various organizations previously mentioned in this chapter as sources of market information also maintain such bureaus.

PERIODICALS MAINTAINING SPECIAL STOCK INQUIRY DEPARTMENTS

American Agriculturist	Century Magazine
Barron's Weekly	Chicago Herald & Examiner
Boston Advertiser	Chicago Tribune
Boston Evening Transcript	Christian Science Monitor
Boston Globe	Financial World
Boston Herald	Forbes Magazine
Boston News Bureau	Judge Magazine
Boston Post	New York American
Brooklyn Daily Eagle	New York Evening Journal

New York Herald Tribune	Toronto Saturday Night
The Outlook	United States Investor
Philadelphia Record	Wall Street Journal
Schenectady Gazette	Worlds Work
Scribners	

The Better Business Bureaus

Incidentally, a word may be said with regard to the splendid work which the National Better Business Bureau and its affiliated branches are doing in their war against fraudulent advertising and stock promotion. The organization is based upon true service and stands generally ready to offer information on stock issues and promotions, especially where there is doubt as to the truthfulness of advertising or the character of the promotion. The National Better Business Bureau maintains its headquarters in New York City, and affiliated bureaus are maintained in the following cities:

Akron	Fresno	Rochester
Baltimore	Hartford	San Diego
Birmingham	Houston	San Francisco
Boston	Indianapolis	San Jose
Buffalo	Kansas City	Scranton
Canton	Long Beach	Seattle
Chicago	Louisville	Stockton
Cincinnati	Milwaukee	St. Louis
Cleveland	Montreal	Syracuse
Columbus	New York	Tacoma
Dallas	Oakland	Toledo
Dayton	Peoria	Tulsa
Denver	Philadelphia	Utica
Detroit	Portland	Washington
Fort Wayne	Providence	

In our consideration of the news-gathering agencies as sources of information, it was stated that the daily newspapers are ordi-

narily more useful in presenting complete and accurate records of actual trading than in the presentation of actual information regarding corporations and their securities. Such a statement is one of degree. The daily newspapers are generally efficient, especially those devoted chiefly to finance, in reporting all current news regarding financial matters. But such news is also presented in more organized form by the statistical agencies, the information bureaus, market advisory services and other sources of security information. The unique service which the daily newspapers render, however, and which is rendered by them alone, is that of reporting the actual trading as it is summarized at the close of each day's session from the ticker reports.

We have also said that the daily newspapers are not as accurate as they might be in presenting such records, but they have improved wonderfully in recent years, in response to the demands of the public, and their co-operation in giving efficient publicity to stock market trading has done much to foster the tremendous growth in the popularity of market operations during recent years.

It is only a very small portion of the trading public which is able to hang over the ticker tape through each day's trading and watch the progress first hand. The vast majority of individuals interested in the various markets get their information on the day's trading and the market changes through the medium of the market reports in their newspaper. In fact, it is difficult to conceive of the individual who is interested in, or is trading in, the stock market, who does not watch the action of his stocks and of the market in general, through the medium of the financial pages of his newspaper.

Reading the Financial Page

Reading the financial, or stock market, page of the daily newspaper has become, especially during the bull markets of recent years, one of America's popular pastimes. A ride on the New York subway, for instance, in the evening homeward-bound crowds, presents a revelation in stock market interest. It seems

conservative to estimate that fully half of the newspaper readers turn at least eventually to peruse the stock market page of their paper.

There is nothing very intricate about reading the financial page or the stock market reports in the daily newspaper, and even the inexperienced trader is probably sufficiently familiar with such pages to need no introduction. The stock market page is correctly called, and often labelled, a record of transactions on whatever exchange it represents. The greatest interest, of course, centers about the record of transactions on the New York Stock Exchange.

The report lists in alphabetical order all active stocks in which any trading has occurred during the day. Each individual stock has one line of the table devoted to its personal record. The best papers give the high and low price range for the issue thus far in the current year, and perhaps even the range for the previous year. Generally in parentheses, or in a separate column, is given the dividend rate for the stock, if any, in dollars per share per annum. If the dividend is paid in cash and stock the cash dividend is listed in figures with a footnote reference indicating that there is also an additional payment in stock. If more than the regular dividend is being paid this will also be explained, either by indicating the total amount of the payment and labelling it "partly extra," or by giving only the regular dividend figure with an added note calling attention to the extra payment.

Open, High, Low and Last

Most newspapers then list the opening, or first, price of the day's trading for the stock, followed by the highest price at which it sold (in 100-share lots of course), the lowest price at which it sold and the "last" price, or the price at which the final sale of the day's session was executed. The last price is generally considered the most important of the four quoted, since the last price determines the "net change" for the day.¹

This net change is the difference between the day's last price

¹ See Chapter XXI, p. 526.

and the last price of the previous day's trading. It is somewhat of an arbitrary figure to take, in figuring the movement of the stock, but is none the less rational. The individual is interested in the very latest price at which his stock was quoted, for that price represents the nearest figure to its practical value in the market. Tomorrow there may be a new value, but just now this closing price represents the very last word on the price of the stock in question. The net change, therefore, is the net change for the day's trading — the difference between today's closing price and the closing price of yesterday. The net change figure is for most persons the most important one in the tabulation, as it shows whether the value of their stock has increased or decreased since they last looked at its quotation.

The more complete stock trading records will also present on the same line for each stock the final bid and asked prices. In some measure these prices are even later than the closing prices, since they represent the respective quotations of prospective buyers and sellers at the very close of trading, even though the last price for the stock may have been recorded several hours before the market closed. In another sense, however, the bid and asked prices do not represent actual trading at all, since we have seen that so long as they are not the same no transaction is possible. The various final bid and asked prices, therefore, do not represent actual transactions, even though they often give a clue as to the actual state of supply and demand for a stock long after the closing price has been negotiated.

Ex-Dividend and Net Change

We have seen that when a stock goes ex-rights or ex-dividend its price automatically and theoretically drops the value of that right or dividend.¹ If a stock, closing at 90 on the previous day, goes ex-dividend \$3 in the morning and closes at 87 that night, it would be manifestly unfair to show the net change for that day as "minus 3." The net change would actually be recorded as no net change since the stock went ex-dividend three points and was

¹ See Chapter XV, p. 353.

automatically entitled to drop those three points without affecting its value at all. If the stock closed at 90, the same as the day before, it would be just as unfair to indicate that there had been no net change. The net change would in this case be the value of the dividend or "plus 3." When a stock goes ex-dividend it is always thus noted, of course, in reporting the sales and the net change for the day's trading in the financial record of sales. We have seen ¹ that in regular transactions stocks and money are not exchanged until the following day. Buyer and seller may agree, however, to conclude the transaction the same day; such trades are called "cash" trades and are so noted in the newspaper reports. They are especially numerous at the close of the month or year.

We have studied in a previous chapter the character of some stocks which have warrants attached to buy other stock.² If a stock is sold with such warrants attached, that is noted in the tabulation of the stock market page, generally by the notation "with warrants," or oftener by the mere initials "w.w." If the stock is sold without warrants, that fact is also noted in the record and the issue is usually quoted "ex-warrants," or often merely "ex-w."

We have seen that only full-unit transactions on the various stock exchanges are recorded on the ticker.³ The stock market pages of the daily newspapers are generally made up direct from the ticker, and thus the volume of sales which is also reported for each stock's daily trading includes only the 100-share lots in active stocks and 10-share lots in the inactive list.⁴ If an order is placed to sell an odd lot of stock, therefore, it is possible that the price obtained may be $\frac{1}{8}$ or $\frac{1}{4}$ point below the lowest price quoted for the day in the record of transactions.

We shall see in a later chapter that the volume of sales for any individual stock is fairly important to the experienced trader.⁵ It is in this category that many newspaper records fall down, and sometimes several of even the best newspapers must be consulted

¹ See Chapter V, p. 86.

² See Chapter XIV, p. 328.

³ See Chapter X, p. 211.

⁴ See Chapter X, p. 213.

⁵ See Chapter XXV, p. 645.

before an exact agreement is found on the number of shares of stock traded.

Reading the Bond Page

Reading the bond market tabulation of transactions is generally regarded as more intricate than the stock tabulations, but if there is any difference it would appear that the bond tabulation is even simpler than that for stocks. Many of the daily newspapers in the larger cities do not report the summary of trades in bonds as they do in stocks, but rather each individual bond transaction under the name of the company issuing the bond, listed alphabetically. The individual trades are listed in order of the time of their execution, as nearly as may be, or in the order in which they have appeared on the bond ticker, which records bond prices in a manner similar to that of the stock ticker.

The unit of trading in the bond market is the \$1,000 bond, so that generally the first figure at the left-hand side of the column represents the number of bonds sold and the figure at the right-hand side of the column the figure at which the transaction was made. There are quite likely to be a number of different bond issues traded of a single company, so that a very brief description, much abbreviated, is usually given at the top of the report for each bond. The abbreviations for such types of bond as externals, debentures, general, refunding, collateral trust, consolidated, and the like, can be deciphered fairly easily after one is familiar with the bonds themselves. The interest rate and the maturity date are also usually given to make certain the correct designation of each separate issue.

One abbreviation needs special explanation, however, and perhaps accounts for much of the confusion and mystery sometimes felt in reading the bond page. That abbreviation is "S7F." Translated into English it means "Seller 7 days flat." That is still, perhaps, not much clearer, but it means that the seller of the particular bond in that transaction reserves the right to defer delivery of the bond for seven days, if he likes. He may deliver the bond and demand payment for it at the price of the trans-

action on the day following the trade. But, again, he has the right to make delivery of the bond on any of the following seven days, provided the regular day's notice is given.

This type of deferred delivery is generally used when sale must be made immediately but the bond itself is physically not available for immediate delivery. A holder in California, for instance, may decide to sell a bond he is holding. He will wire his order in through his broker and the bond is sold on the regular New York market. Under the rules of bond delivery, similar to those for stocks, the bonds must be delivered the following day, if the transaction is made "regular way." The California holder cannot quite, even in this day of speed, get his bonds to New York for delivery the following day. So his broker arranges for the transaction to be made "seller" as many days "flat" as will be required for the bonds to reach New York.

Deferred Delivery in the Bond Market

This method of contract is also used by traders who wish to sell bonds short. There is no organized "loan crowd," or loan market, for bonds as there is in the case of stocks, and it is therefore often impracticable to borrow them. There is no logical reason, however, why bonds should not be sold short, on occasion, as well as stocks, and for like reasons. If a trader thinks a certain bond is selling too high and that he can buy it lower at a later date, there appears no logical or economic reason why he should not contract to deliver the bond at a later date but at the currently prevailing price.

That is exactly what is done, even though somewhat unofficially, when a bond is sold short. The process is, of course, much simpler than in the case of a stock sold short. There is no borrowing of the bond — merely a promise to deliver it some time within a certain number of days and receive the price stipulated in payment. On the other hand, short selling in bonds is thus made much more apparent than in stocks. It is never quite certain, of course, whether the deferred delivery is due to the time it will take to get the bond to New York or to a short sale. It

is generally assumed, however, that by far the majority of deferred delivery transactions in bonds represent short selling.

We have previously intimated that the delivery may be deferred any number of days the buyer and seller agree upon. "Seller 30 flat" would therefore mean that the seller had 30 days to deliver, etc. It is important to note, however, that the interest received by the seller on the bond ceases the day following the sale. After that the interest accumulating on the bond belongs to the buyer, whether he has actually accepted delivery of the bond or not. We have seen¹ that this adjustment of bond interest is largely a bookkeeping arrangement anyway, so that the provision is simple of calculation, though quite important from a financial standpoint.

A Portion of the Bond Page with Hieroglyphics

It should now be an easy matter to understand the various hieroglyphics of the bond page and read off the transactions in familiar style. The first portion of the bond tabulation noted on the accompanying figure represents the day's transactions in bonds of Hudson & Manhattan Railway Company. A block of \$14,000 worth face value of the company's refunding 5's sold at $87\frac{3}{4}$. Next, \$4,000 of the same issue, seller 15 days flat, or on a 15-day deferred delivery by the seller, at a price of $87\frac{1}{2}$. Thereafter \$1,000 of the same bonds sold at $87\frac{5}{8}$. Transactions in the company's issue of adjustment 5's consisted of \$4,000 sold at 77 and \$1,000, or a single bond, sold at $77\frac{3}{4}$.

The next portion of the day's bond report shows transactions in the bonds of New York, Chicago & St. Louis Railway Company, better and more conveniently known to the trader as "Nickel Plate." First, \$2,000 of the company's debenture 4's of 1931 sold at $97\frac{1}{2}$. Then \$5,000 of the same issue, seller seven days flat, or on a seven-day deferred seller's delivery, at $97\frac{3}{4}$. In the company's consolidated $4\frac{1}{2}$ per

PLATE 71
A Portion of
the Bond Page

Hud & Man	
ref 5s, 1957	
14.....	$87\frac{3}{4}$
4s15f...	$87\frac{1}{2}$
1.....	$87\frac{5}{8}$
adj 5s, 1957	
4.....	77
1.....	$77\frac{3}{4}$
N Y C & St L	
deb 4s, 1931	
2.....	$97\frac{1}{2}$
5s7f...	$97\frac{3}{4}$
con $4\frac{1}{2}$ s, 1944	
18.....	$101\frac{1}{8}$
2s10f...	$101\frac{1}{4}$
1.....	101
3.....	$100\frac{7}{8}$

¹ See Chapter XIV, p. 312.

cent. bond issue there was a transaction of \$18,000 of bonds at $101\frac{1}{8}$, followed by \$2,000 on a 10-day deferred seller's delivery, at $101\frac{1}{4}$. Next \$1,000 of the same bonds sold at 101 and the final sale of these bonds for the day was \$3,000 of them at $100\frac{7}{8}$.

Most of the large New York papers, and those out-of-town also, report trading on the other important New York exchanges in somewhat the same way but usually without so much detail, giving merely the volume of sales, high, low and closing prices. They also report the most important sales of issues on many of the more important security exchanges in the larger cities outside of New York. Current prices, or bid and asked prices, are also quoted on many other unlisted, or "over-the-counter," securities, whose market is not very active. Such quotations are usually gleaned from specialists or reliable unlisted, or over-the-counter, traders and brokerage houses.

We should now be familiar with the various common sources of stock market information. In the next chapter we shall try to discover which are the most important factors of information in forecasting future market movements. In Appendix H, on page 817, are listed a group of such important news factors, with the approximate time of their regular issuance and the sources where they may generally be found.

CHAPTER XIX

WHAT MAKES THE MARKET MOVE

The Tidal Movements of the Market

In our recent discussions we have tended to grow somewhat more technical in our consideration of the stock market and stock market trading. As we grow more familiar with the market and extend our studies, it is logical, and indeed necessary, that our discussions should take on a more professional flavor, but let us try always to remember that fundamental doctrine that the buying and selling of stocks is nothing more nor less than the buying and selling of part interest in a definite and productive property value.

So long as we keep this fact as a background we may go on in our studies into more technical fields which appear at first glance to have forgotten that any such theory exists.

In order to understand better the tidal movements of security market prices we must study the more apparent and more immediate influences which affect the actual fluctuations of stocks. The man who is interested only in one stock and is interested in that stock only for the long-pull need not be so concerned over general market movements. He may make his individual analysis, decide that he has found a good company in a good business and may go ahead and buy the stock with little regard for more technical considerations. But the man who buys stocks in this manner is really not a stock market trader. He is shaping his action in the market without regard to the more technical considerations which often, and generally, have just as much effect upon the market course of his stock as have the fundamental considerations which led him to invest in this specific issue.

It is not enough, for instance, to know that General Motors Corporation is a strong concern, that its long-pull prospects are very brilliant, that its profits and the price of its stock should

gradually show increase in future years. All of these things were true at the peak of the bull market in 1919, and the individual whose market analysis took account only of such basic factors was quite justified in buying General Motors new common stock at the equivalent figures of over 40 which were then current. But the more technical considerations which the individual had failed to consider were at least partly responsible for an almost continuous decline in the market value of General Motors common stock from those prices at the end of 1919 to an extreme low level of under 10 in 1921. This man was correct in buying Motors at 40 so far as his analysis and market knowledge went. But it did not go far enough to include all of the factors necessary for consideration in stock market trading, and for his neglect in consideration of those more technical but important factors he would have suffered a market depreciation of not far from 75 per cent. in less than two years had he bought Motors at that time.

The Market and Individual Stock Movements

It is necessary, therefore, to consider other factors besides the comparative attractions of individual companies and their stocks. One of the most important of these, in a very broad description, is the movement of the market as a whole. The market is made up, of course, of the individual stocks which compose the market. To that extent the same factors apply to general market price movement as to the price movements of individual issues. The chief difference is that there are many more factors which affect general market movements than which affect any individual price movement. This is patently true because not all possible market factors enter into a consideration of one individual stock, but if the entire market of thousands of individual stocks be considered then one is certain to find practically every possible market factor exerting some influence, be it large or small, on the entire market movement.

Between the general market as a whole and consideration of the individual stock issue stands the classification of groups. The

general market may be broken up into only a few such classifications, as industrials and railroad issues, perhaps adding also the public utilities; or it may be broken up into a great many different groups, such as steels, coppers, miscellaneous metals, electric light, gas, water, and transportation stocks, the electric equipments, railway equipments, aviation issues, banks, investment trusts, motors, accessories, chain stores, coals, chemicals, foods, leathers, oils, mail orders, textiles, tires and rubbers, tobaccos, shipping issues, and so on.

Our previous studies have made us familiar with the manner in which the market price of an individual stock issue fluctuates in value. The general movement of the market is nothing but a rather imperfect composite of such individual market movements of the chief stocks which go to make up the market. The exact figures which constitute "the general market movement" are variable and more or less arbitrary. The theoretically perfect index of the general market movement would perhaps be the composite price movement of all individual stocks dealt in during any one trading session, with the market movement of each individual stock weighted according to the degree of importance of that particular issue, based, perhaps, upon the number of shares of its stock outstanding or the number of shares traded in during the session under observation.

Chief Market Indexes

In actual practice there is no such ideal index of general market movement. There are perhaps several dozen actual indexes maintained which profess to show the general trend of market movement on the New York Stock Exchange. Of these only about a half-dozen are recognized as dependable and commonly used. None of them pretend to be ideal, for none of them include the entire number of individual issues traded in and none of them weight the issues according to their individual importance. Most of these recognized indexes select a comparatively small list of individual issues, but they select the most important standard stocks, with an eye to public participation, market

leadership, market representation, large capital, importance of the industry and other qualifications which result in a fairly satisfactory picture of the general market movement.

The *New York Times* presents an index of 25 industrial stocks, 25 railroad stocks and the 50 stocks combined, charted in Plate 103.¹ The *New York Tribune* presents an average of 70 industrial stocks and 30 railroad stocks. Dow-Jones, or the *Wall Street Journal*, present an index of 30 industrials and 20 railroad issues. This index is inclusive of a comparatively small number of issues, but they are quite representative, and one of the advantages of the index is its long history, the compilation dating from 1900. A new index of 20 utility stocks was also added in 1929. Standard Statistics Company, Inc., of New York, presents a shorter but more complete index of 90 stocks, including 50 industrials, 20 railroads and 20 utilities, with further detailed classification by smaller individual groups. These series are perhaps the most scholarly for they are based on 1926 relatives and weighted according to the number of shares of each stock outstanding. The specific issues included in these accredited averages are listed in Appendix G, on page 813. One of the oldest American series of stock index numbers was prepared by the author while with the Federal Reserve Bank of New York. It goes back to 1872, connecting later with the Dow-Jones index.² The chart is shown opposite page 675 and details of the compilation will be found in Appendix K, on page 829.

While we have no ideal index of the general average movement of stock market prices therefore, we have several representative indexes which move fairly close together and any one of which may be considered a satisfactory series of indexes. It is easily apparent that some such index series is necessary before we can adequately study or consider the general movement of the market. While there are such various practical methods of indicating the movement the true general fluctuation of the market is self-explanatory. It is merely the price movement of the majority of the more important individual issues traded in during any given period. It is the major movement, the outstanding

¹ Opposite Page 683.

² See Page 679.

tendency, or the "general trend" of stock market prices in trading.

Since the stocks which move against the general or average market trend are the exception and not the rule, and since it is also the rule for most stocks to change their market prices in any trading session, it is evident that there will almost always be some movement of the averages. And further, since approximately the same general influences are being brought to bear on the majority of all listed stock issues, it is only logical to assume that by far the majority of representative issues will move in consonance.

Consonance of Individual Movements

In actual practice this is found to be the case. The make-up of the average prices presumes that the movement will be the major movement. But the extent and direction of the average movement in any trading session is usually much more than the narrow result of a delicate balance, or tug-of-war. There are periods when the averages do not move very rapidly, but such periods are more often the result of small and indefinite movements of the individual issues rather than major conflicting trends. By far the most ordinary action of the individual issues is a fairly general response to general factors affecting the whole market and a fairly general agreement, therefore, on the direction, if not the extent, of the general market movement as expressed in the representative averages.

We have seen that the individual stock issues in any trading group move quite generally in the same direction at the same time. We have also seen that the generally accredited method of gauging this movement is through observation of the representative averages or indexes of market prices.

We have likewise seen that study of this general movement and familiarity with the factors which affect it are quite as important in successful stock market trading as the analysis and familiarity with individual stock issues and their individual prospects. It is our duty, therefore, to pay more particular attention

to these major factors which are generally considered to exert a strong influence upon the price fluctuation of the stock market as a whole.

Supply and Demand as a Basic Market Factor

If the reader has digested the forces which we have seen at work in actual stock market trading on any exchange, his natural and logical answer to the question of what makes the general market move in any given direction will doubtless be, "the law of supply and demand." In its most direct relation this is the correct answer to such a question. If there are more buyers for any stock than sellers, then there will be more bids than offers and the price will advance in direct response to the theory upon which any legitimate market operates, the theory of a perfectly free market where buyers and sellers meet and the law of supply and demand establishes current values for the commodity dealt in. Likewise, if there are more sellers than buyers there will be more stock offered than bid for and the price will decline. The law of supply and demand determines the relative movement of the price for any individual stock, and since the general market is merely an imperfect composite of individual stocks traded upon it, then the average market movement must also be a direct result of the workings of the law of supply and demand.

But this answer to our inquiry as to what makes the market move is too easy. The true reasons are to be found in those factors which affect supply and demand. The latter reason is merely a law. It acts automatically and as more of a medium than a motivating force. The true motivating force which effects the general market movement is the combination of the factors which affect supply and demand.

Again the most simple answer would be "people." Since buying and selling orders originate with individuals, it is clear that "people" make the market move. Right again, and the answer gives us food for thought even though it is not a sufficient one to our question. Since people make the market move, then our chief problem is to find what factors will bring about a greater

amount of buying than selling, or vice versa. Fortunately, from a practical standpoint, public opinion and public understanding are fairly well agreed upon certain factors, and it is these factors which we must consider.

Two General Types of Market Factor

The factors which exert a major influence on the general stock market movement may be roughly divided into two chief classifications. The first consists of the natural factors, the second of the more technical factors. The natural factors include the general and fundamental ones which we have previously studied in connection with our analysis of individual corporations and their securities. They are the general state of industry at the current time and the future prospects for general industry.

Just as we have seen in our previous studies that the most attractive individual stock issue to purchase is one with good current earnings and with improving prospects for increased future earnings, so the most advantageous time to buy such a stock, or any stock, for that matter, in the general market, is when the current earnings of business and industry are good and when the prospects for an increase in such earnings over the future are also good.

From the standpoint of the general market movement the future is more important than the present, just as in the case of the individual issue. Theoretically, the current levels of general stock prices are supposed to have discounted already the present state of corporation profits. The element which really exercises the greatest control over the future movement is the change in general profits which may occur in the future.

The Aim of Stock Analysis

Stock market analysis takes its origin in determining whether the majority of traders will be trying to buy or sell stocks at a future date. If everyone knew this they would act accordingly and there would be no merit in analysis. The object of the

analyst is to mark out the current trends which will affect buying and selling at some future time and to use such knowledge by anticipating for himself, or for his clients, this future tendency.

In a general way future business profits are dependent upon current and future business, and to that extent the forecasting of price movements in the market, dependent upon earning prospects, is in turn dependent upon the present and future of business. Before the individual can deal intelligently with the causes of general business fluctuation he must know how to measure the current state of general business. Such "tools" of his investigation are generally called business indexes.

Business as a Factor in General Market Movements

Naturally, there are a great many indexes of the current state of business. Their importance is largely a matter of personal opinion based upon personal experience and study. The leading series of individual business indexes include such factors as commodity prices, pig iron production, steel production, freight car loadings, bank debits, corporation profits, store sales, unfilled steel orders, savings bank deposits, industrial production in various lines, building statistics and many other individual series, all of which are held to evidence, more or less directly, the current state of business.

With such individual factors as their base, various indexes of general business activity are compiled by individual agencies. The different series of data are allotted varying weights, or units of comparative importance, and the resulting composite figures are published as true representative business indexes. Various banks, bureaus of commerce, industrial boards, newspapers, and stock market and statistical services have their own formulae and their own indexes of general business.

The value of such indexes is unquestioned but it is a comparative value. The individual who attempts forecasting the stock market merely from such an index is not likely to achieve any great degree of success. It is merely one important factor of a greater number of factors which must be considered in judg-

ing the future course of stock market values. The fundamental reason for this comparative value lies in the fact that the stock market generally discounts a change in the trend of general business before it actually shows up in the indexes of business.

Which Reverses First: Business or the Market?

The current business index would be a splendid barometer if this were not true. Since stock prices fluctuate largely with earnings, and since earnings fluctuate with business, stock prices should also fluctuate with business. In a general way this correlation, or similarity of course, holds true in past history, as is shown by the accompanying chart in Plate 72. But it is more often true that by the time the business index has displayed a change of trend the stock market trend has already reversed itself, and the opportunity for market profits from this source is by no means dependable. The business index is a fairly definite guide, however, for the long-pull, and it is one of the more important factors in long-pull forecasting.

The above-mentioned defect of the correlation can often be overcome by individual observation of the various factors which go to make up the general business index. For instance, if the nation's corporations have been enjoying a long period of prosperity and the majority of the factors entering into the general business index have been favorable, it is logical to assume that they will continue so until fundamental conditions change or until the individual factors begin to drop.

If commodity prices begin to decline, for instance, after the general business index has been advancing, there is a "first signal" of possible reversal in the index. If production in various individual lines begins to sag there are additional signals. These may be only intermediate movements, of course, and only long experience and good judgment, together with fundamental considerations, can bring expert conclusions. The successful analyst is the one who can decide whether such reactions constitute merely an intermediate reaction or presage a definite reversal in the general trend of the business index. If the latter,

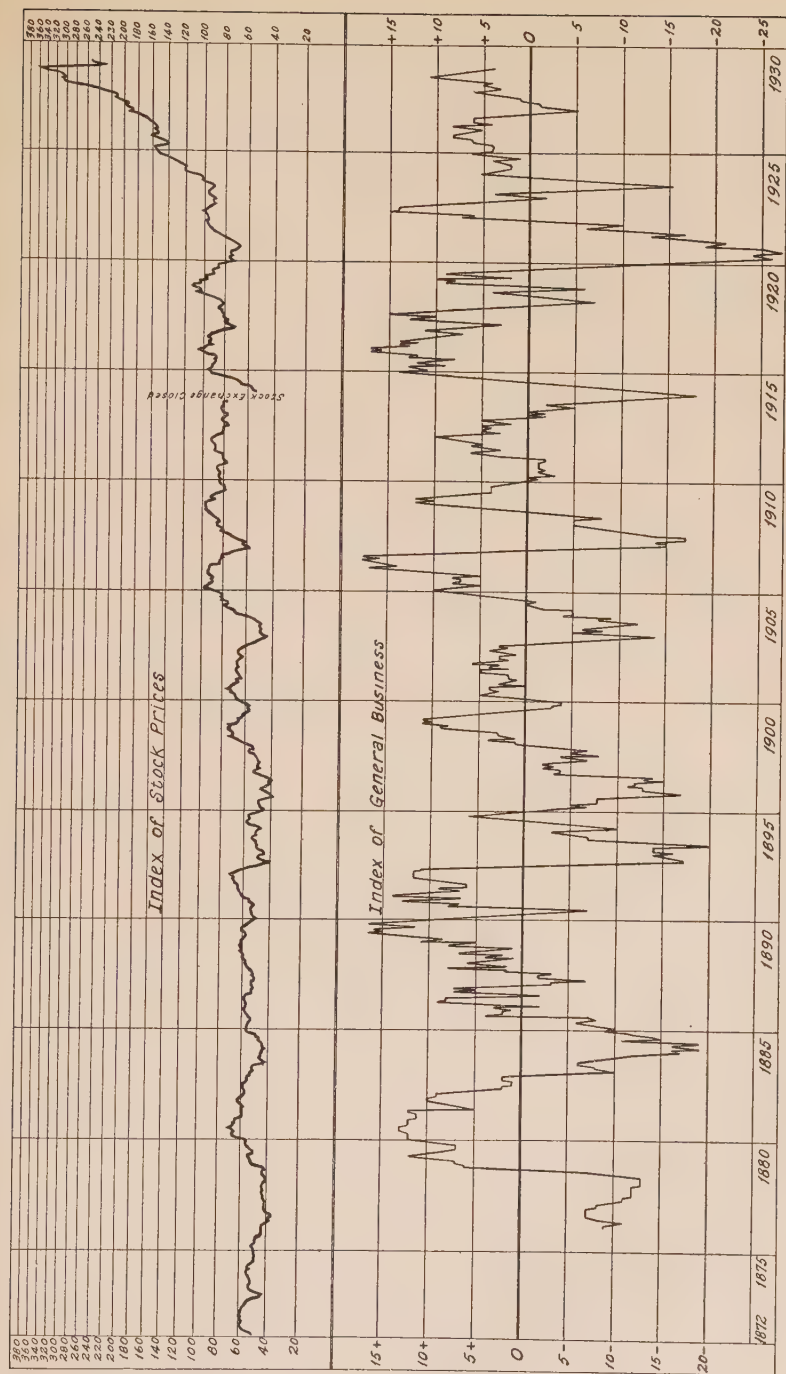


PLATE 72. COMPARISON OF BUSINESS AND STOCK MARKET INDEXES, 1872-1930.

The 60-year stock series is here shown in the top line and one of the best indexes of business activity in the lower line.

then the individual is justified in forecasting lower stock earnings and lower stock prices before the general index of business has actually reversed its course. The same reasoning applies, of course, to discovering the first signs of recovery in the general business index after a long period of decline.

Forecasting Reversal of the Business Index

We have previously made mention of the fundamental considerations which enter into any judgment of the future course of the business index as it may be reflected in the course of stock market prices. We have seen that it is not enough to realize change in the general situation after the index has already shown a definite reversal of its previous course. By that time it is quite probable that the stock market's general index will have gone far toward reversing its own previous course in discounting a change in corporation and stock earnings for the future. It is therefore important to be able to judge the future course of business before it is actually signalled by the business index.

We have also seen that this can often be done satisfactorily by analysis of the various individual series which go to make up the general business index. But the reversal of one or two of these series may be merely temporary and may not signal a definite reversal of the index. Likewise, the entire index may at times reverse itself only to switch back again after a few weeks or months and eventually show that the apparent reversal was merely an intermediate reaction without having changed the previous general trend. The successful analyst, therefore, must know what probabilities to expect in the future, and his greatest assistance in this study is consideration of the natural factors, or the fundamentals, affecting future business.

Fundamentals Affecting Future Business Trends

In the category of such fundamentals we again find a great many factors, all of which appear in the past to have exerted a

certain definite influence on the future course of the business index. Experience and study are the only means of learning what individual fundamentals are the most important. In a general way and expressly for the long-pull future tendency the author would stress the importance of two chief factors: supply of credit and reverse swings in production.

Both of these chief factors are closely bound up with the theory of business cycles, which will be discussed more completely in a later chapter.¹ For the moment, it is necessary only to understand how the actual supply of credit affects industrial production. If credit facilities are easy, as evidenced usually by low interest rates, normal reserve ratios of the banks and comfortable ratio of net banking reserves to loans, then expansion is made easy in both production and consumption.

The producer has plenty of credit to buy his inventories, pay his labor a good wage, raise additional capital for expansion of producing facilities and carry forward the general conduct of an active business. Consumption is also stimulated by high wages and easy credit with which to buy an increased amount of goods. Tight money conditions, on the other hand, generally exercise a gradually depressing effect upon business. Interest rates generally advance, money is difficult to borrow, the producer tries to cut his inventory, curtails his buying, finds difficulty in financing expansion and reduces his output and wages, while the consumer finds his income reduced by lower wages and unemployment and his buying power further reduced by the comparative scarcity and high price of credit with which to purchase additional goods.

Reverse Swings in the Business Index

In large measure the second important factor in the fundamentals affecting business is closely related with the first. The reverse swings in production are nearly always traceable to some form of excess, which is reflected in an excessive condition of credit, either extremely easy or extremely tight. The tendency

¹ See Chapter XXVI, p. 661.

for business to expand when credit is easy goes to excess, uses up too much credit; credit again becomes excessively tight and production must fall. Likewise, tightening credit leads to too drastic curtailment of business, the demand for credit falls rapidly and again the stage is set for resumption of easy credit and increasing business.

To a large degree, however, the reverse swings in business are due, perhaps, more to the actual physical factor of supply and demand than to the factor of credit which we have just observed. The latter factor regulates the production and consumption in industry in a somewhat indirect manner, but in a more direct manner consumption and production regulate and limit themselves. Within the limits set by such factors as credit, consumption of goods pursues a fairly limited course and cannot be expanded indefinitely. The usual course of the business cycle, therefore, results from excesses in both production and consumption, but especially in the excess of production over consumption. When consumption is on the increase, the tendency is for production to rapidly overtake and go far beyond even the increased rate of consumption. Gradually, even these increased demands of consumption are filled, dealers' stocks pile up, inventories rise and the old evil of over-production again brings an abrupt reversal to lowered business activity. Likewise, low production falls below even low rate of consumption after a long period of poor business, dealers' stocks run low and gradually the depleted situation gives way to another period of advancing business.

As we have before mentioned, and shall later outline more fully, this theory is largely one of cycles, but it is none the less important. Analysis of the general business index is largely a matter of our old friends experience and study, but all of these factors can help us considerably in becoming experienced and more accurate in our understanding of present tendencies as they may affect future trends.

For instance, if the business index (or some of its individual components) turns downward after a long advance and very good business, it is more likely that the reversal is a definite one,

and not a false alarm, if the previous upward movement has been long and rapid, if production has been running at high levels for some time and if credit conditions appear to have become definitely tight. And such reversal would be more likely to be merely an "intermediate reaction" if the preceding advance in the business index had been only moderate, if business were not running especially high compared with previous periods and if the credit situation were still comparatively easy. Conversely, a sudden advance in the business index after a downward swing would be more likely to prove a true long-term signal of reversed form, if the previous downward trend had been long and interest rates were easy, than if the reverse considerations applied.

Technical Factors Influencing Market Movements

So much for the influence on long-term market movements of the natural or fundamental factors. Besides the factors concerned more directly with general business conditions and their future trend, there are the more technical factors which enter into the formation of long-term movements in the general stock market.

These technical factors are the direct opposite from the fundamental or natural factors which we have previously considered. In this chapter we construe the fundamental considerations as those which underlie the actual value of the stock or stocks, while the technical factors are those arising out of the market for such stocks itself and affecting the mechanics of that market. The fundamental factors are more likely to be long-pull considerations or to be gauged from a conservative investment standpoint, while the technical factors are more likely to be rather short-term considerations appealing to the speculator who places more emphasis on the immediate mechanics of buying and selling trends in the market itself than upon the more lasting evidences of basic values.

General business and stock earnings may be very good and such fundamental considerations may imply that the market index will advance. On the other hand, there are such factors as the amount of money which investors have for market opera-

tions, pool activities, credit conditions and public psychology, which may keep people from buying stocks no matter how good they think the long-pull prospects may be.

Perhaps the most important of the technical considerations which affect the general course of market prices is the credit situation. We have previously seen that easy credit is conducive to advancing business and stock earnings, while tight credit indicates probable reduction of business volume and stock earnings. These factors apply to the fundamental element of business and stock profits, and therefore to the actual value of stocks. In a more technical manner, easy credit conditions imply that the public finds it easy to raise money for the purchase of stocks and for advancing market prices, while tight credit conditions are more likely to bring about a technical situation where the majority of potential stock purchasers cannot find the money or credit to buy the stocks they would like to, no matter how favorable they believe future prospects may be for those stocks.

Credit as a Technical Factor

In the consideration of credit conditions we have our conventional indexes of condition, just as in all other definite factors affecting business and the market. We have previously become familiar with such indexes,¹ including the interest rates charged for call money, or demand loans, time money, commercial loans, bankers' bills, rediscounts and so on. All of these types of credit instrument are indexes of the general credit situation. Commercial paper rates, bankers' bills and the like are used mainly in business and industry and, as such, they are the types which apply more to the fundamental element of business and stock earnings than to the technical factors influencing market movements.

Of these technical credit facilities, we have seen that the factor most closely allied with stock market operations is the call money market. For that reason, call money rates exercise the most important and most direct effect upon prospects for the general

¹ See Chapter XI.

movement of stock prices from a technical angle. If call money is scarce and the stock market purchaser is forced to pay 10 per cent. or more each day to finance his purchases, he is not so likely to buy additional stocks, no matter how good their fundamental prospects, as if he had to pay only a low rate of perhaps three or four per cent. on his demand loans, or debit balance.

Next to call money rates the most important credit factor from a technical standpoint is time money, or the rate charged on collateral time loans. We have seen that this form of credit is also used extensively in financing stock market operations, and its importance in gauging the future course of market prices is large. The rate for time money is also important because it tends to show the future course of call loan rates. The banker who expects call money rates to go from their current levels of six per cent. to 10 per cent. during the next 90 days would hardly be likely to lend his money on 90-day time loans at the current rate of six per cent. He would more likely strike an average of what he expects call money to lend at over the next 90 days, with probably an added fraction for protection. Under such circumstances he would probably set his rate on time money at about nine per cent. Such a rate would indicate that the general probabilities favored an increase in call money rates from their current levels of six per cent. to considerably higher prices over the next 90 days.

Brokers' Loans in Market Forecasting

Another aspect of the credit situation, with relation to the technical factors governing future general market trends, is the compilation of brokers' loans. We have seen that some clue to the future state of the credit market may be had from the relative expansion or contraction of business and its resulting demands upon the credit supply. In like manner, some clue to the future of the credit situation may also be obtained by studying the relative levels of stock prices, their values and the amount of credit which such values are consuming. Compilations of brokers' loans are supposed to give a fairly accurate check on

how much credit is being used to support the stock market at any given time. In practice, the picture is distorted by many outside factors. These include the fact that brokers' loans are used to finance new issues of stock and bonds whether listed on the Exchange or not, and often even before they have been offered to the public, as well as to finance the carrying of the actual accounts of brokerage house customers.

Furthermore, the figures are misleading because they do not include the amount of credit which brokers and private customers have utilized in the stock market by time loans and other collateral loans made directly with the banks, corporations or other lenders. The relative amounts of such brokers' loans which do not appear in the official compilations have been almost unquestionably increased to a tremendous degree in recent years, especially through attempts to keep the actual compilations from growing too rapidly.

Brokers' Loan Compilations

The chief compilations on brokers' loans are made up by the Federal Reserve Bank of New York (See Plate 73), issued every Thursday after the close of the market, and by the New York Stock Exchange (See Plate 74), which latter figures are issued a few days after the close of each month. The Federal Reserve figures are made up from reports of the chief loaning member banks in the New York Federal Reserve district and cover the week ending Wednesday night before the report is issued, therefore reflecting market operations for the week ending on Tuesday. The New York Stock Exchange compilation is made up of reports from the brokerage members of that Exchange for the month previous to issuance of the figures. They have generally run a little higher than the Federal Reserve figures.

The Federal Reserve Bank figures classify the amount of loans to brokers according to whether they originate with the New York member banks, with the out-of-town correspondents of such banks, or with "others." In the past couple of years there has been much discussion of this third group of loans to brokers, for it

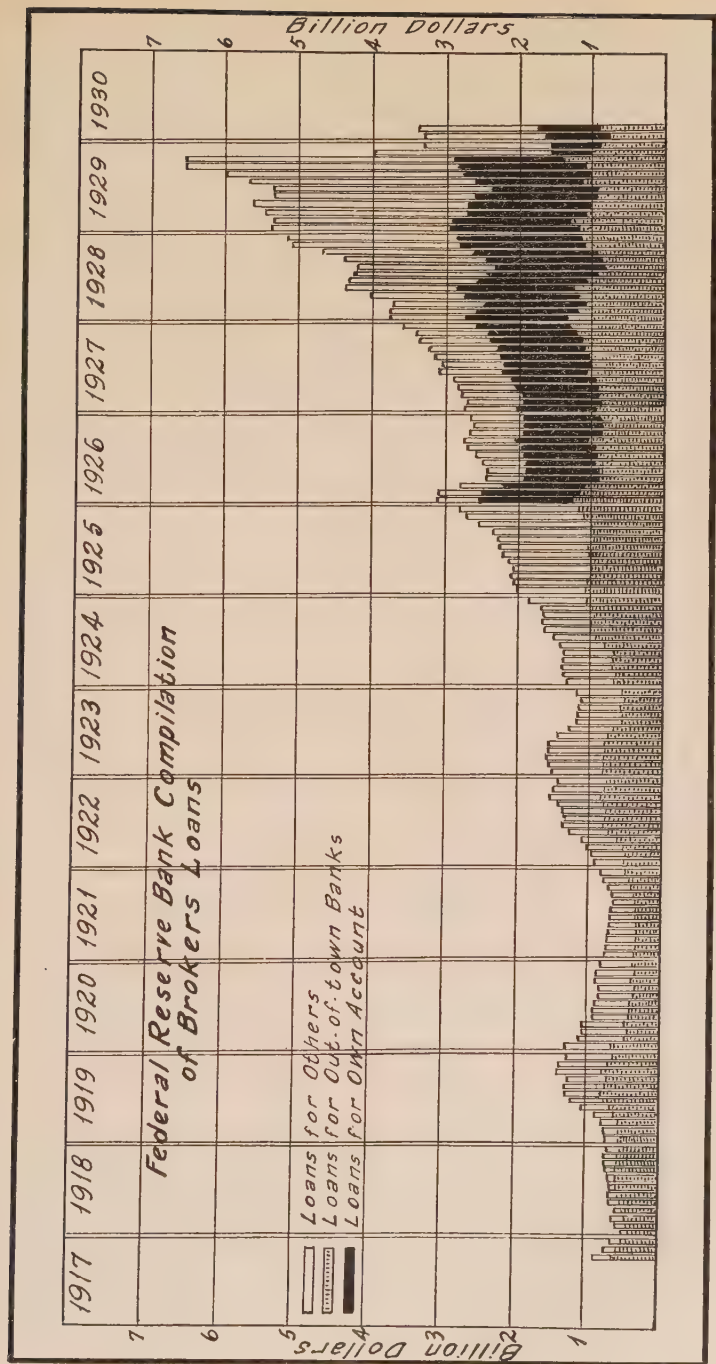


PLATE 73. FEDERAL RESERVE BANK COMPILATION OF BROKERS' LOANS

Classified according to the three regular groups. The "Out-of-Town" classification was included in figures for "Others" previous to 1926. Note the rapid advance in Loans for Others, often termed "Bootleg Loans" previous to the Panic of 1929.

is more or less out of control of the banking system. The Federal Reserve authorities felt that brokerage loans were using too great a proportion of the nation's available credit and influenced New York City and other member banks into a gradual drawing down of their brokerage loans. Corporations, foreign governments, individuals and other private parties appeared still to have plenty of funds to loan at the high call money rates prevailing during most of 1929, however, and supplied more credit for the speculative markets than the reduction in the other two classifications. The Federal Reserve Board seemed powerless to regulate the flow of this credit, which came to the market through the member banks but at the orders of the various individual customers of such banks.

"Bootleg Loans"

Much has been said and written about the advisability of designing laws for bringing the new element of credit popularly termed "bootleg loans" under banking control, and such control logically appears necessary if the nation is to have any powerful central banking authority. There are plenty of arguments on both sides of the question, however, but it is hardly of sufficient importance for the general market to merit a discussion in this volume.

The important angle of brokers' loans for the student of future stock market trends is not the source from which they emanate but the volume in which they are available for stock market operation. Despite the limitations of these brokers' loan compilations, previously referred to, there is no doubt but that they present an important consideration in general stock market forecasting.

Just as business activities go too far in either direction, from a cyclical standpoint, so stock market movements and stock market sentiment are likely to be overdone in either direction. The relative levels of such compilations as these on brokers' loans afford a comparative clue as to the measure of extremity prevailing in market valuations at any particular time.

Relation of Brokers' Loans to Speculation

More important than such a consideration, however, the brokers' loan compilations indicate the proportion of speculation prevailing in the market at any given time. The greater the speculation, the greater the amount of stock held on margin and the greater the volume of resultant brokers' loans to supply the balance of credit and the weaker is the technical position of the general market. To a large degree it may be assumed that the man who holds his stock on margin is holding it merely for a short-turn rather than for long-pull investment. He is more likely to be the short-term speculator who is content to sell out his stock and retire his loan if he gets a few points profit. To that extent, therefore, the amount of stock purchased in the market and held on margin is in "weak hands" compared with the stock that is taken out of the market, paid for outright, without any strings of credit attached, and perhaps put away in a safe deposit vault for long-term appreciation over the long-pull.

A rapidly rising market is not so vulnerable to sharp reactions, therefore, if brokers' loans are not increasing rapidly, as a rapidly rising market when such loans are also going up at a rapid rate. In a general way, rapidly rising brokers' loans are taken to indicate an unhealthy condition in the market and a weakening technical situation which may lead to general reaction, while, conversely, falling brokers' loans indicate an improvement in the technical position of the general market and the growing probability of at least an intermediate recovery if the trend has been downward in the general stock market index of prices.

Some allowance must be made, however, for the constantly growing number of issues listed on the New York and other stock exchanges and for the increased number of shares thus listed. Allowance should also be made for increasing prices of such shares, since as the market prices of shares increase it is logical to expect an increase in the amount of credit, or brokers' loans, normally necessary to carry the total amount of stocks listed at the higher prices.

The Brokers' Loan Ratio Index

In order to make due allowance for such factors a fairly simple expedient has been resorted to. The New York Stock Exchange publishes regularly, along with its compilation on brokers' loans, the actual market valuation of all the shares listed on the Exchange as of the same date. The simple ratio of brokers' loans to total valuation of listed securities makes a much more satisfactory index than that of brokers' loans alone and is called the brokers' loan ratio. Its recent course is presented herewith, in Plate 74. In a general way, an advance in this ratio indicates that stock market credit is increasing faster than stock market values, that more stock is going into "weak hands" and that the technical position of the market is being weakened, while, conversely, a decline in the ratio indicates that loans are being liquidated faster than values are declining and that stocks are therefore working into a stronger position.

Effects of Rediscount Rates on the Market

The rediscount rates of the various Federal Reserve Banks, especially that of the Federal Reserve Bank of New York, are also considered significant factors affecting the probable future course of the general market and come under our heading of technical considerations, even though these rates may be considered fundamental in a larger sense, since they are the result of fundamental conditions in the fields of banking and finance.

The immediate effect of changes in the Federal Reserve discount rate, especially in New York, is almost always overdone by the stock market, but that is because the speculative elements of the market almost always overdo any technical factor which it is known has far-reaching, even if slow-acting, effects upon security prices. Changes in the bank rate do not exercise immediate influences on the market except from this speculative standpoint, but they do have long-term effects upon market valuations, and for that reason the market, always intent on discounting future trends, pays much attention to such official bank rates.

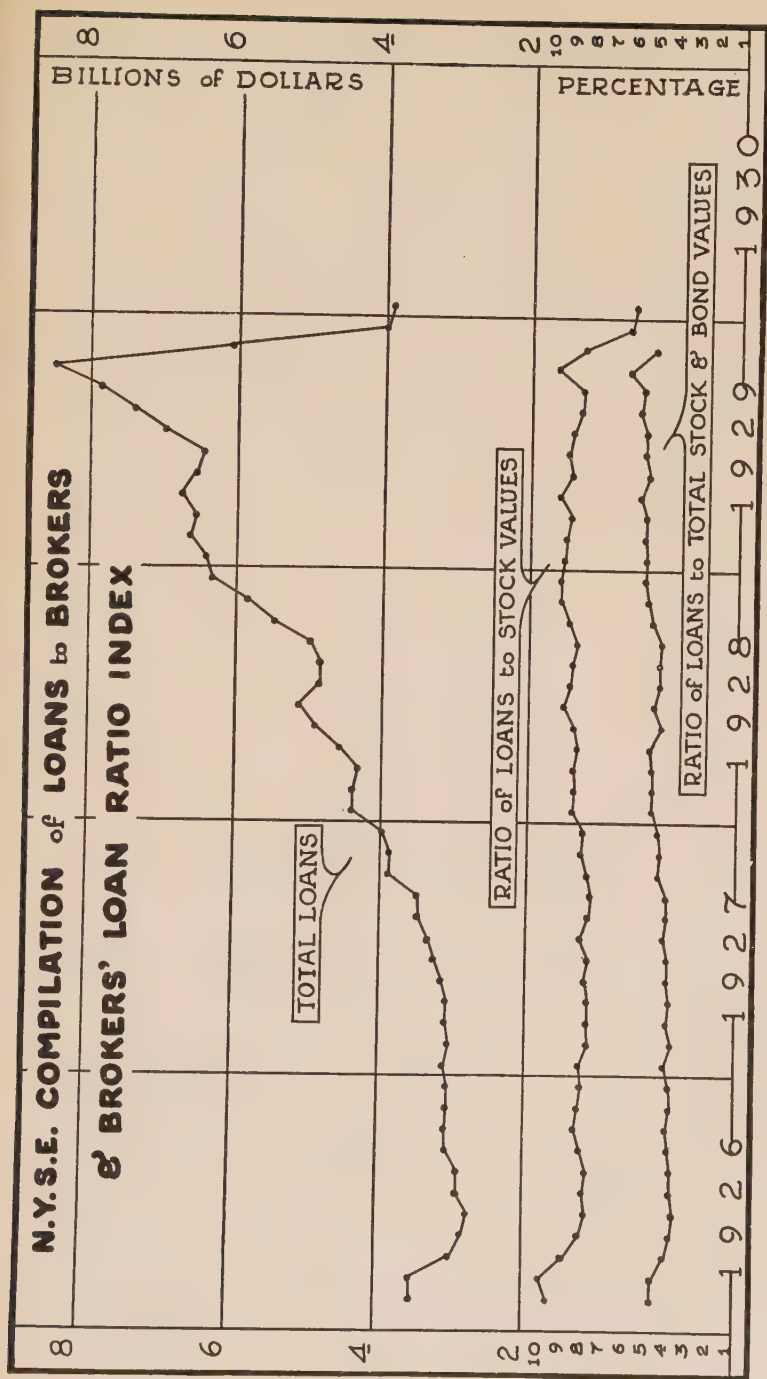


PLATE 74. NEW YORK STOCK EXCHANGE BROKERS' LOAN COMPILATION AND RATIO INDEXES

Total loans to member brokers are shown in the top line. The middle line shows the percentage of such loans to value of stocks listed on the N. Y. S. E. The bottom line shows the percentage of brokers' loans to the market value of stocks and bonds combined. Note comparative high points of the middle line reached preceding the market reactions in March 1926, October 1927, December 1928, and May and October 1929.

The underlying effects upon the market are due to the very nature of the bank rate. Technically, the rediscount rate of the Federal Reserve Bank is merely the rate of interest at which it accepts credit paper from member banks for rediscount or loans to such banks. We have previously seen that collateral loans and security paper are not accepted for rediscount by the Federal Reserve Banks, but the effect of such bank rates is indirectly important to the stock market. The Federal Reserve banking system is the ultimate reservoir of credit in the United States and provides the elastic credit necessary for business. Since this credit underlies all other credit, the official bank rate is somewhat the basis for all credit, no matter of what type. It is thus both an index and a motivating force in establishing the general levels of interest rates for the entire country and for whatever uses credit may be put to.

We have previously seen that interest rates have a direct bearing upon the natural course of stock market prices from a technical standpoint. The inference is simple, therefore, that aside from its more direct bearing, the official bank rate of the Federal Reserve institutions indicates the current basis for general interest rates and thus has an indirect but strong effect upon market action.

The question as to whether the bank rate follows or precedes actual open-market interest rates is a fine one and needs no discussion here. In most cases it appears that the bank rate does both to some extent. The Federal Reserve Boards have come in for much criticism in the past couple of years as a result of charges that they exercised an arbitrary and high-handed influence in making money tight through artificial means. There is little doubt that the Federal Reserve Banks took in rope at times, with the result that credit tightened, but there is nothing to indicate that they did so except to maintain the nation's banking system in a healthy state and leave room for the granting of commercial credits when needed by business of the country. Certainly the Federal Reserve policy sponsored just as extreme ease in money early in 1930 as tightness in the first part of 1929.

Rediscount Rates as an Index of Credit

Whether changes in the bank rates precede and cause, or follow and are the result of, changing open-market credit conditions, the fact remains that the discount rate is a good index of credit supply and cost. An advancing discount rate, therefore, tends to indicate future decline of security prices, while a declining discount rate tends to indicate advancing prices for security markets. And this indication is once more the result largely of the cost of carrying securities. It affects buying power and buying power in turn affects the relative supply and demand for securities in the open market, as well as of goods.

In our study of the technical considerations influencing longer-term movements of the general stock price index we have found that most of such considerations can be expressed in definite figures, chiefly by interest rates and the like. In the case of one important factor, however, there is no very definite index by which the student may be guided, except, in a general way, by the composite of such definite interest rates.

The Element of Public Savings

The factor to which we refer is that of public savings. There are figures on savings bank deposits and they help considerably, but fundamentally there is no index of the amount of money which the general public is saving. But that element is highly important in any thoroughgoing study of the probable future course of security prices. We are by this time familiar with the effect of interest rates upon speculation and the general trend of security prices. Our present factor is largely akin to this element, but differs from it because interest rates do not always indicate the relative buying power which arises directly from such public savings.

In a general review of past history it appears that the public saves at a fairly constant rate over long periods of time. Every now and then, perhaps not more than 10 times in a single century, however, there develops a period of perhaps five or six years when

a combination of fortuitous factors results in some drastic and material departure from this constant rate of public saving. The rate depends largely upon such chief factors as employment, the level of general wages and the level of commodities and living costs. When wages are low and living costs high, then savings drop rapidly below the average constant rate and the prospects are for generally low investment buying power and generally declining prices for securities. On the other hand, when wages are high and living costs low, then the reverse situation develops. The public has a widening margin between necessary expenses and income — savings rise, whether apparent in savings bank deposit figures or not, and the indication is strong for rising security prices.

Some such situation may be cited to account in large measure for the spectacular advance of stock prices from 1921 to 1929. Industrial prosperity and labor-saving devices, new inventions, etc., increased the public wealth rapidly at a time when commodity prices and living costs remained comparatively constant. The result was a large and general increase in surplus income of the American public. There are other fortuitous factors to be considered, of course, such as the spectacle of large stock market profits, mergers, large-scale production and further industrial development, which led the public to put its surplus into stocks rather than into some other channel, but the factor is always an important one, for it is always in the background of long-term swings in the security markets and is worthy of study by the stock market trader.

Public Psychology and General Market Movements

Consideration of the factors which lead the public into diverting surplus funds to the stock market rather than into other channels leads us directly to the great and important factor which we may call market psychology. It is another element for which there exist no very definite measurements or indexes but which exercises, nevertheless, a very important bearing upon the course of general market prices. We have seen that prospects for business,

earnings, interest rates and the like all exercise a more or less definite effect upon the future course of stock prices. The psychological factors work partly with these other elements as their basis but they have also other and added elements which are purely individual.

Earnings and business and other factors may be growing and the close student of the market may see them long before they actually develop. It is fairly certain that even the casual student will see them before the general public. In fact, the general public, without whose help there can be no very large or important swings in the general market, rarely sees the changes in such factors until its attention is definitely called to such developments, generally quite a while after they have appeared and often after they have reached their full proportions.

For such reasons the public must be awakened to participation in the market, on one side or another. If the market is to go up with the public solidly behind it, then the public attention must be caught by spectacular events, such as rapid advances in individual stocks, rapid development of mergers, new inventions, the stories of huge fortunes made in a short time — in short, the figment of huge and quick profits from mergers, combinations, stock dividends, stock split-ups and so on.

If the market, conversely, is to go down with the public assisting the move, the public must be awakened to unfavorable circumstances by spectacular occurrences, such as tremendous declines in individual stocks, huge fortunes lost in a short period, disappearing profits of large corporations, bank failures, brokerage house failures, suspended dividends, corporation receiverships and the like.

In other words, public psychology is one of the important motivating factors in any long-term stock market movement, and the student of market fluctuations for the long-term cannot afford to neglect such factors or the development of such factors as will mold that public psychology. In large measure, such developments are natural phenomena and arise from purely natural economic laws, but that is no reason for their neglect by the conscientious observer.

Stimulating Public Psychology

And in part, at least, such factors arise also from well-organized group effort on the part of pools, combinations and other factions operating in the markets, for the express purpose of molding such public psychology. There is no means of measuring what part such organized methods play in the molding of popular psychology, but it matters little from what source the stimuli arise. The important thing is that they do arise, that they exercise a decided influence upon the long-pull future course of stock market values, and that the market trader who can uncover them first, as they are developing, and can trace their psychological effect upon public trading, will profit from his research and forehandedness.

An important corollary of this psychological factor is found in its relation to the law of cycles. There are certain definite economic foundations for the law of cycles in business as well as in the stock market, but there are certain fundamental considerations of a psychological character which also tend to create the movement of cyclical price changes. Granted that fundamental conditions are always in flux and are tending generally too far in any given direction, with the reactionary result, public psychology also is constantly in flux, also tends to go too far in any certain direction and also, therefore, tends to swing back and reverse its course.

The student of the stock market need not be much of a student of psychology or his fellow men to see the underlying cupidity, the tendency toward excess, the inertia of any line of thought, which accounts for the development of cycles in stock market movements. It is perhaps safe to say, especially since few would dare deny it, that practically every important, long-term swing of stock market prices has been forced to an extreme by this element of public psychology.

Public Psychology and Market Excesses

The entire field of psychology and the stock market is an intensely interesting and fruitful one and will repay further study

than we can here afford. Suffice it to say, that in the early stages of any general market movement public psychology makes it quite safe to follow such movement. It generally indicates also that the movement will go considerably beyond any fundamental or rational point. And the student who makes full allowance for its effect will be constantly on his guard against predicting the reaction, or the turn of the cycle, too soon after other factors have indicated the approach of such a turn. There are few elements in stock market analysis which have led prophets astray so often and so disastrously, led them into the bugaboo of being "right too soon," as has this element of psychological cycles and popular excess, which tends always to carry any movement forward in its present direction long after the other factors have predicted a turn in the cycle.

While this element of public psychology indicates comparative safety in following a general market movement in its early stages, however, it makes following such a movement in its later, and chiefly psychological, stages exceedingly dangerous. The very fact that such psychology is powerful enough to carry a movement far beyond its warranted limits makes such psychology exceedingly temperamental and undependable in its later stages. In such stages it is best for the conservative long-swing investor to cease his operations and watch the show from the sidelines, until the warped psychological stage has passed and the market has resumed a natural course, which has been previously predicted by the more definite and more easily measured factors which go to influence the general movement.

We have now reviewed some of the more important factors, fundamental and technical, which affect the future course of the general market. In the preceding chapter we studied the sources of information through which we may keep posted upon all such factors as they develop. In Appendix H, on page 817, are listed a variety of news statistics regularly published, showing where and when they ordinarily appear.

CHAPTER XX

AN INTRODUCTION TO TRADING

Reviewing the Fundamentals

In the immediately preceding chapters we have discussed the general factors with which the potential trader should be familiar and which should influence him in deciding when, what and why to buy or sell in actual stock market trading. We have examined the various considerations which make a stock attractive in itself; we have seen that there are other technical factors which may offset such fundamental attractions; we have seen that the general market tone offers still another background for the trader's study and consideration; and we have examined some of the factors, both fundamental and technical, which offer indication of whether general market conditions are favorable or unfavorable as a basis for campaign in any individual issue.

With this background behind us, we may go on to more practical study of actual market activity. All of the previous considerations have been chiefly preliminary to successful stock market action, but such action cannot be instigated until we also have a complete knowledge of the methods of actual trading, for after all, trading or the giving of orders and the actual buying and selling of stocks is the crux of our entire study. It is here that all of our fundamental knowledge comes to a focus in definite market action.

We are already familiar with the machinery of the stock exchange, with the broker's office and with our relations with the broker who carries out our instructions. We have opened our account with the broker. We have even given some orders and had them executed. We have also seen that orders may be given in different ways and according to different types. We can buy or sell stocks at the market or we can put in limited orders at a certain price. We can give our limited orders good only for a

few minutes, good only today or for any time we care to fix. Or we can give our orders good until cancelled.

Cancelling Limited Orders

We have seen ¹ that after an order is given "good until cancelled" it remains just that — it continues on the broker's books until it is either executed or is later cancelled by the customer. There is a tendency among careless traders, happily and naturally in the minority, to forget about G.T.C. orders and get a big, and perhaps unpleasant, surprise some morning to find in the mail confirmation of a transaction which has long been on the broker's books but forgotten by the customer and just become possible of execution. It is quite possible that if the customer had remembered that the order was in force he might have changed his mind and cancelled it, and it is only a basis of thorough and efficient trading to keep a continuous list of one's orders as they are transmitted to the broker, checking off those orders which are executed and thus having a constant record of what orders are still on the broker's books for future execution.

To offer a check on such a personal record as well as to jog the memory of the careless and forgetful trader, most brokerage firms make a practice of sending out a notice periodically, showing the customer what "open orders" are on their books. The customer checks these with his own record and corrects any discrepancy.

The Stop-Loss Order

There is one very important type of order with which we still have to become familiar. This is called the stop order or the stop-loss order. It is not to be confused with the "stopping of stock" between brokers where two brokers agree to trade stock when, as, and if the price reaches a certain figure. Such trades are based, therefore, on regular transactions but are not recorded on the tape. The stop-loss order is an order which does not go into effect until the actual market price of the stock in question

¹ See Chapter III, p. 56.

reaches a given figure. Immediately upon the stock touching that figure, however, the stop order goes into effect as a market order. Stop orders to buy are usually placed above the current market, while stop orders to sell are generally placed below the current price. Otherwise it would generally be more satisfactory to enter a limited order.

For example, suppose Mr. Angell placed an order with his broker to sell 100 American Can at $154\frac{3}{4}$ stop. It may be assumed that Can was selling above this figure or the order would have been to sell 100 Can at $154\frac{3}{4}$ G.T.C. If Can declined gradually to reach the stop price Mr. Angell's stop order would not go into effect until that price or lower had actually been reached in the market quotations for the stock, at which time the order would immediately and automatically become one to sell 100 Can at the market.

Since the full-lot order does not become effective until after the sale which automatically makes it effective, the order is not necessarily executed at the price at which the stock is stopped. Generally, if there are no previous orders ahead of it, the stock is bought or sold on the next succeeding sale after the one at the stop price which made the stop order effective. We shall see later ¹ that stop-loss orders on odd lots differ from full lots in this respect. Since the stop order becomes a market order when it goes into effect, the price at which the order is executed will usually be lower than the stop price in case of a selling order, and higher than the stop price in case of a buying order.

How It Works

This is not necessarily the case, however. There is really, of course, no way of telling at exactly what price a stop-loss order will be executed. In the case presented, of Mr. Angell's order to sell 100 Can at $154\frac{3}{4}$ stop, suppose that Can was selling at 156 at the time the order was given. Suppose, also, that thereafter it goes constantly on upward, the stock would not be sold until such time as it again reacted to the stop price. But suppose in-

¹ See Page 487.

stead that Can begins to decline, selling at 156, $155\frac{1}{4}$, $154\frac{7}{8}$, 155, $154\frac{3}{4}$, 154, 155, and then back once more at 156. Mr. Angell's stop-loss order would not go into effect until the sale of Can was made at his stop figure of $154\frac{3}{4}$. Immediately upon execution of that sale, however, his order would go into effect to sell 100 can at the market. His broker would thereupon take the highest bid he found in the open market. That bid was 154, and Mr. Angell's stock was therefore sold on the transaction of 154 which followed the sale making his order effective. It is Mr. Angell's hard luck that the stock immediately rebounded to 155 and then back to 156 again. His sale stands, of course, at 154, even though his stop price was $154\frac{3}{4}$.

We may assume, however, that the next sale after $154\frac{3}{4}$ might have been at 155 instead of at 154. In such case we may also assume that Mr. Angell's stock was sold at 155, a little above his stop-order price instead of below it. Generally, however, the combination of the tendency already developed for Can to sell lower and the additional supply of stock created by Mr. Angell's selling order at the market would tend to depress the stock still further and he would receive a price less than the price at which his stock was stopped. The tendency of stop-loss orders, therefore, is to hasten the movement already in progress in any stock. If a stock is declining, then any buying orders automatically uncovered are those which have been placed as limit orders under the market. The automatic selling orders under the market are almost entirely stop-loss orders, and since more and more of them are uncovered as the market declines, the tendency is for the stock to decline further and more sharply if there are a lot of stop-loss orders. When there are a lot of such stop orders just under the market, then the prospect for the market price of the stock is unfavorable from that standpoint. The stock explanation of financial writers for sudden and sharp declines in the market is that the "market was honeycombed with stop-loss orders." Despite its common use to explain almost any sharp decline, it is perhaps one of the most common reasons for acute market weakness, at least when viewed from a technical standpoint.

Stop-Loss Orders as a Market Factor

On the other side of the market, an advance in any issue is likely to be continued and abetted by stop-loss orders. Selling orders placed above the market are generally limited to a certain price above the current quotation. The origin of automatically effective buying orders during a market advance is in the stop-loss classification. When there are a lot of stop-loss buying orders above the market, therefore, the technical situation is strong, for as the price of the stock advances it reaches higher prices at which stop-loss buying orders are automatically touched off, such buying thus extending and aiding the tendency toward further advance.

The stop-loss order, whether to buy at a price above the market or to sell at a price below the market, is nearly always used to protect a previously assumed position and limit the amount of loss incurred in case the market goes against the trader. If he buys a stock at 100 and wants to be sure of not losing more than a couple of points he puts in an order to sell the stock at 98 stop. If he sells the stock short at 100 and wants likewise to limit any possible loss from his commitment he places an order to buy the stock, and thus cover his short sale and close the transaction, at 102 stop.

Uses of the Stop-Loss Order

Another use of the stop-loss order is for the trader who thinks a move is coming in a certain stock but does not know just when it is to begin. He can place an order to buy, if he thinks the movement is to be upward, at a stop price a little above the market, with the assurance that when the movement begins and carries the stock through his stop figure he will automatically be "placed aboard" the movement. If he expected the movement to be downward he would place an order to sell the stock at a stop price moderately below its recent levels, with the assurance that when the downward movement began he would be sold short in its early stages. The stop order is also effective in getting in on

a major movement before it has gone very far through the use of resistance levels, which will be treated later in more detail.¹

Stop-Loss Orders in Odd-Lot Trading

Stop-loss orders may be used in odd-lot trading as well as in full-lot trading. We have seen that the odd-lot buyer must pay a fraction more for his stock than its actual sale price in 100-share lots on the exchange, and the odd-lot seller receives a fraction less than such market price for his odd lot. In the case of a stop-loss order on an odd lot the stop order goes into effect just as in the case of the full-share lot, that is, immediately and automatically when the price of the full-share trading in the stock reaches or crosses the exact price of the stop order.² Thereafter, however, the odd lot is bought at a fraction above and sold at a fraction below the price of the full-lot transaction which made the stop order effective, instead of waiting for the next price as in full-lot trading.

To go back to our previous example, for instance, Mr. Angell might have placed his order to sell five shares of Can (instead of 100 shares) at $154\frac{3}{4}$ stop. As soon as the price of Can reached $154\frac{3}{4}$ or lower, therefore, Mr. Angell's order to sell would be executed $\frac{1}{4}$ point below the price which made the order to sell effective. This price we have seen,³ was the exact stop price of $154\frac{3}{4}$. Since Can is a "quarter stock," Mr. Angell would receive that sale price, less $\frac{1}{4}$ point for his odd lot, or $154\frac{1}{2}$. His 100-share lot brought only 154, as we have previously seen, but his odd lot would bring a price of $154\frac{1}{2}$.

Both of these prices are well below the stop price on the stock, and this fact, not always but quite often the case, is one of the objections to the use of stop-loss orders. We shall see later, however,⁴ that their use also has some decided advantages and, as a matter of fact, the practice of using stop orders has grown greatly in popularity in the past couple of years. This growth is due in large measure, perhaps, to growing familiarity on the part

¹ See Chapter XXII, p. 542.

² See Page 484.

³ See Page 485.

⁴ See Chapter XXII, p. 538.

of new traders, but seems also due to growing realization of the advantages in the method.

In the case of an odd-lot order stopped, therefore, the execution goes into effect at the same time and in just the same way, as in the case of a stopped full-lot order. The full-lot order, however, is thereafter executed in the next full-lot sale possible while the odd-lot order is executed at its usual fraction away from the exact full-lot price which put the order into effect, and without any reference to the next sale after such order has gone into effect.

Execution of Stop-Loss Orders in Odd- and Full-Lot Trading

As we have seen in Mr. Angell's case the odd-lot order stopped may be executed at a more favorable price than the full-lot order stopped. On the other hand, the odd-lot order may get a poorer execution on a stopped transaction than on a full-lot transaction. The odd-lot order, for instance, is considerably more liable to the disadvantages of a sudden drop in a stock on a single forced sale, after which the stock quickly recovers on the next sale. We have seen that the next sale after the $154\frac{3}{4}$ which put Mr. Angell's stop order into execution, and on which his price was based, might easily have been 155 instead of 154. In this case, Mr. Angell's full-lot sale would have been executed at 155, the next sale following, but his odd lot would have been sold at the actual price which put his stop-loss order into effect, $154\frac{3}{4}$, minus the $\frac{1}{4}$ point for the odd-lot, or only $154\frac{1}{2}$. If there had been no sale at the exact stop price of $154\frac{3}{4}$, but an abrupt drop from 155 to 154 and then back to 155 again, the full-lot order would probably receive 155 while the odd-lot sale would be executed at only $153\frac{3}{4}$.

Sudden price changes from the previous levels more often take place at the opening of a market the day after some important news has been made public. On the day after the Federal Reserve discount rate of the New York bank was raised from five to six per cent. in August, 1929, for instance, opening prices were as much as seven and eight points below the previous close and succeeding sales were almost generally higher than the opening prices. In such a case the sales of odd lots "touched off" at the

opening were probably executed at less favorable prices than the full-share lots, which latter were sold in succeeding sales instead of based upon the first price which put the order into effect.

Wide Openings after Overnight News

When such a sudden change in prices occurs at the opening of a new day's trading there is always considerable complaint from traders who ordered stocks sold at the opening, at the market, or whose stop-loss orders have been put into effect by the sudden decline. In the latter case, it is necessary to explain the most common exception to the usual custom of executing full-lot stop orders on the sale following the one which makes them effective. In the case of an active stock, and when there is no great rush to buy or sell, it is usually possible for stop orders to be effected in the usual way, which appears the most satisfactory one.

Practically all stop-loss orders are handled by the single specialist in the stock named, however; and on extraordinary days, as that referred to above, it is practically impossible for the specialist to execute each regular order and each stop order singly and in correct succession. Under such unusual circumstances the specialist is quite likely to "bunch" his orders and execute as many as possible on the initial sale. Since in case of a sharp decline the supply of stock is much greater than the demand, the specialist must open the stock at a comparatively low price in order to find enough buying orders on his books to take care of all selling orders — regular selling orders which have poured in from all over the country, as well as the stop-loss sale orders which the specialist knows will be "touched off" by the low price of the initial sale.

And here enters the exception to the usual custom of executing stop-loss orders on the sale following the price stopped. The overworked specialist may have 20 or 30 market selling orders for execution at the opening on such an unusual morning. He can also gauge just how many of his listed stop orders are going to be put into effect by his opening transaction and he gauges his opening transaction by consideration of those stop

orders. The opening bunch sale of his 25 regular orders which have accumulated overnight may put into immediate effect 25 more selling orders at the market on account of stop-loss orders. It would be practically impossible for the specialist to handle all of these 50 orders individually and in their proper order, and even if he did there would be many more complaints than from the method which he actually uses.

Specialist May "Bunch" Orders

In such extraordinary circumstances the specialist's only salvation is to "bunch" all 50 of these selling orders and execute them all at once on the initial sale. In order to find enough buying orders to take care of all this stock to be sold he must go fairly far down his list of orders under the previous market, and the result is the large openings at large declines, similar to those which occurred on the day following the advance of the New York bank rate in August, 1929, to which we have previously referred.

The practice of the specialist in thus executing stop-loss orders at the opening, without waiting for the opening sale to put them into effect, always causes a great deal of unfavorable comment and generous complaint of "poor execution" to the commission broker. Technically, and according to usual custom, of course, such stop-loss orders would not be executed until after the initial sale. Theoretically, however, the specialist knows that the huge supply of stock overhanging the market on such an unusual opening is depressing the price, and from such a standpoint, as the specialist calculates, perhaps only mentally, his stock supply and demand, the price of the stock is declining through the stopped prices of all these orders, even though the market has not yet opened and even though the low price which will make such stop orders effective has not been reported as a transaction.

This unusual practice of the specialist departs, therefore, from the general custom followed in executing stop-loss orders; but, after all, there is no definite law under which the specialist is forced to wait for the next succeeding sale before executing stop

orders, and his action in such exceptional circumstances not only simplifies his own work and keeps the market from complete demoralization, but it results in less unfavorable executions and a smaller number of complaints than if he tried to execute each order individually.

A Market Convenience

In the latter case, the opening sale would unquestionably be higher than it is in practice, but it would also mean a rapid succession of individual orders, at constantly dropping prices. The orders to sell stock at the opening would have to be executed before the stop-loss orders, and by that time the price would be much lower than the prices at which the stocks were stopped. If the closing price the previous night had been 156, for instance, and Mr. Angell had his order in to sell his 100 Can at $154\frac{3}{4}$ stop, he would be a bit peevish over the specialist's report that his stock had brought only $149\frac{1}{2}$, if he had seen a long string of previous sales from $154\frac{3}{4}$ down. He would be disinclined to realize that the specialist had to sell perhaps 50,000 shares of Can ahead of his stopped stock on account of market orders to sell at the opening. And he would be just as loath to realize that the decline in the stock had put into effect selling orders for 25,000 shares more of stock, which was stopped at prices higher than his own, between last night's close of 156 and his stop of $154\frac{3}{4}$, and which called for sale, therefore, ahead of Mr. Angell's 100 shares.

Rather than execute all of these individual sales one by one, therefore, and have complaint from just about every seller, the specialist will open the stock at perhaps 50,000 shares sold at an opening price of $149\frac{1}{2}$. This is a big drop from the 156 at which the stock closed the previous day, but it is due to the huge overnight accumulation of selling orders, together with the stop-loss orders which would be put into effect by the unavoidable decline in the stock. By bunching his orders in this way the specialist executes probably almost all of them at once. The sellers may suffer by such a low opening, but on the other hand the buyers

benefit and the specialist is just as much the agent of the buyers of any stock he trades in as of the sellers. Furthermore, he has done away with most of the complaints resulting from such a situation as we noted above — if he had tried to execute each order singly. By bunching them all, each seller got the same price and could not complain that he was discriminated against in the order of his execution or the low price received..

Complaints on Wide Openings not Justified

Though the complaints are probably reduced by this unusual procedure on the part of the specialist they are by no means avoided entirely. Such a low opening invariably brings numerous complaints of “poor execution.” Technically, the complainants have much on their side, but practically, the method followed appears to be the least of two evils and is the best course possible under the existing circumstances. After all, it is the fault of the traders who go to make up the market, and not of the specialist, that selling exceeds buying and that the price must inevitably break.

The lesson to be learned is not to follow the crowd but rather to choose generally to do otherwise. When it appears from any piece of news that the next morning will see an avalanche of selling, it is often much better to buy at the opening than to sell simply because of this procedure and because the huge amount of selling is quite likely to depress the stock market too far, or at least too fast.

The common complaint of the trader who is thus “rooked” out of several points at the opening by a drastic decline is that the specialist reaps the benefit of such decline by taking the stock offered at low prices himself. So far as the rules of all reputable stock exchanges are concerned, this is absolutely against the law. In the first place, such playing for himself would be dangerous, since the specialist must consider the demand and supply constantly coming into the market to him from outside and he might be tied up with the stock if the supply continued to come in.

In the second place, the specialist, and in fact no trader, could

“get away” with such a practice for very long without being detected by the other traders with whom he is constantly coming into contact and reported by one of them, because he has been “cheated” himself if for no moral reason. Such practice on the part of the specialist, at least on the larger exchanges, would be almost certain of detection, and even a well-founded rumor that he had ever indulged in such an irregularity would be enough to put the specialist in disgrace for the rest of his life and to bar him forever from again engaging in dealings with reputable members of the exchange. Even if he were not bound morally and by the laws of the exchange he serves, the specialist has too much to gain from keeping his reputation and record clean to take any chances on personal profit from such unusual circumstances as we have been considering.

The best way to avoid the disappointment of such extreme opening prices on a day of heavy overnight buying or selling is to refrain from precipitate action when news of any type breaks overnight and is likely to influence the opening unduly the next morning. We shall see more clearly in the next chapter that it is too late to act after the “news is out.” It is then much better to wait a little longer and see how the market reacts after the first shock has been met.

The Stop and Limit Order

There is another way of giving a stop-loss order, however, which prevents such disappointing sequels. That is the “stop and limit order.” In this case, the order is given and put into effect just as in the case of a plain stop order, but the price at which the order is executed, after it goes into effect through the stop, is limited to a certain price. It is merely a combination of the stop and the limit order. If, in the case previously studied, Mr. Angell had given his order to “Sell 100 Can at $154\frac{3}{4}$ stop and limit,” then the order to sell would have gone into effect just as the original stop order, when the price of Can reached $154\frac{3}{4}$, but it would not have been executed unless the broker was able to sell it at that stop price of $154\frac{3}{4}$ or better.

The stop and limit order may also be given with a stop limit price different from the stop price. Mr. Angell might have given his order to "Sell 100 Can at $154\frac{3}{4}$ stop, limit 156." In such case the order to sell would have gone into effect when the price of Can touched $154\frac{3}{4}$, but it would then have become a limit order at 156 and would not have been executed unless and until the broker could sell for 156 or better.

All of our recent discussion applies equally, of course, to a rising market. Poor executions are possible, though perhaps less common, on a sudden advance in the opening prices, due to overnight buying order accumulation and the specialist's unusual action, just as in the case of a sudden overnight decline. And the stop and limit orders may be used to equal advantage in buying and in selling.

The Coupled Order

Another type of order which is in growing use and has its advantages is the "coupled order." This order is a combination of two individual orders, one of which is to be cancelled immediately upon execution of the first one which becomes possible. An order may be given to "Sell 100 Can at $156\frac{1}{4}$ or $153\frac{3}{4}$ stop. Coupled." In such case it is assumed that the stock is currently selling in between those two prices. If Can advances to a point where sale can be made at $156\frac{1}{4}$ or better, then such sale is made and the order to sell at $153\frac{3}{4}$ is automatically cancelled. If, on the other hand, American Can should decline to $153\frac{3}{4}$ before it advances to $156\frac{1}{4}$, then the stock is sold at the lower price, just as though the only order given had been to "Sell 100 Can at $153\frac{3}{4}$ stop," and the order to sell at the higher price is immediately and automatically cancelled.

This type of order is used almost solely in short-turn trading, where the trader is either satisfied with a small profit or undecided whether the stock will touch his upper price before it begins to decline. He can protect his position by the lower stop price but also retain the possible chance of getting out at the higher price on a bulge. Where a coupled order to sell is given

the trader usually expects the major trend to be downward or he would retain the stock.

The coupled order may also be used, of course, in buying. Here the stop order would be at the higher price, of course, and the order would read, "Buy 100 Can at $153\frac{3}{4}$ or $156\frac{1}{4}$ stop. Coupled." With Can selling at 155 the trader would probably be expecting a further advance in the stock. By use of the coupled order he would protect himself against the rise catching him presumably short without the stock purchased, and would also place himself in a position to buy the stock at a cheaper price in case it should have a little reaction before advancing.

Short Selling

We have previously ¹ studied the method of trading which is commonly called "selling short," and are familiar with its physical characteristics, its operations and its necessary procedure. We have seen that from a theoretical and moral standpoint there is no reason why one should not sell stock short, before he actually has it in his possession, just as he sells his future services, or his crops, products, manufactures and what not, before they are actually produced.

We have also intimated that the practice of short selling is perhaps less justified in practice than in theory.² This is true largely because of the factors of danger and risk which are much greater in selling stock short than in buying it long. The reasons for this are self-evident. If the trader buys a stock at 20 he is perfectly certain that the value of that stock cannot decline below zero, and he is therefore certain that in the worst possible eventuality his loss would not be more than \$20 per share. On the other hand, the trader who sells a stock short at 20 has no such guarantee that his possible loss will be limited. The decline of any stock is limited by its original price. The advance of a stock is unlimited. The sky is the limit and therefore the eventual possible loss on a short sale is infinity.

This consideration is largely a theoretical one, however. It is

¹ See Chapter IX.

² See Chapter IX, p. 170.

the basis for what the author deems should be a good rule, for the novice at least, to follow. That rule is that he shall never sell a stock short without either an actual or a mental "stop" price. In other words, never to sell a stock short without measuring the possibility of being wrong and the loss which one is willing to accept in case he is wrong. In general, it is better to place the stop-loss buying order at the time of selling short.

The mental stop-loss order is more for the use of the experienced trader and the professional. It can often be stretched, but such stretching takes nerve and capital, and quite often it results in much larger eventual loss than if either the actual stop-loss order had been used or the mental stop been put into effect by covering the short sale at the original price mentally decided upon as the limit of one's risk. The use of a definite stop order on all short sales is generally safer not only in limiting possible eventual loss, but also in protecting the trader from one of the most nerve-racking positions he can get into.

Stop-Loss Orders to Protect a Short Position

That position is being short of an advancing stock, trying to buck the trend, hoping against hope for a reaction, meanwhile watching the stock work higher and higher, with paper loss also growing larger and larger, and without the courage, or ability, to accept one's original mistake and take the consequences like a man. In point of fact, it is quite often advantageous to assume a short position with a "double stop" or a "switching stop." This is a short sale with a stop order above it to buy twice as much as was originally sold short. The effect, of course, is to go long of as many shares as the trader was previously short, besides covering his original short sale, at the price decided upon.

The order is not for use by the neophyte in stock trading, but its advantages are apparent in the case of a stock whose position has been puzzling. A stock may give indication, from a technical standpoint, of an early and major movement but give no indication of which direction that movement will take. The trader may wait for the stock to "declare itself" by starting such major

movement, or he may establish the position favored by the direction he expects the movement to take, and protect his position by a switching stop.

If his original analysis has been wrong, therefore, and the stock starts its movement in the opposite direction, it is not long before his stop order goes into effect and switches his position to the correct one. The amateur trader would do best to let alone a stock in such an indefinite position, however, since he may merely be caught in an intermediate movement or "mopping up process," preparatory to the stock turning into its actual major trend. In any case, due to such "false starts" the switching stop should be placed far enough away from the original price position to make this eventuality comparatively distant.

The Stock Corner

The danger of the much dreaded "corner" exists only, of course, in the category of the short sale.¹ The man who owns a stock is glad to see it skyrocket under the impetus of a dwindling supply. But the corner is the bugbear of the "short." The corner is a term applied to a very unusual condition in a stock when a pool or individual has quietly obtained control of most of the surplus stock available for trading purposes, commonly called the "floating supply," and thereupon refuses to sell that stock to traders who have taken an unfortunate short position and are seeking to cover.

In such a corner the stock becomes scarcer and scarcer, the scarcity leading to high premiums for borrowing it, abetting the desire of shorts to cover; but they are unable to buy the stock in the open market for covering purposes and for delivery of their previous short sale, without forcing the price to exorbitant levels. The corner is the bane of stock trading, since it is a technical factor which sends the price of a cornered stock to heights out of all proportion to fundamental value, and thus interferes with the theoretical economic operation of any formal stock market and the trading thereon.

¹ See Chapter IX, p. 178.

Most exchanges have rules against such corners if they can be proved to have been intentional, and arrange for suspension of trading and suspension of delivery of such stock if it is decided that a technical corner exists. In such case, demand for the stock generally drops perpendicularly, the group holding the corner is sometimes left holding the bag, with consequent loss, and the stock generally takes months and even years to recover from the effects upon it of such an occurrence.

The corner is, therefore, one of the potentially more dangerous factors in short selling, but its dangers are practically dispelled if the rule is followed for placing stop-loss orders on all short sales. We have previously warned that the neophyte should not sell short.¹ We have touched upon some of the reasons. Of the most potent ones, which need no discussion, are those of mental strain, worry and market psychology. For the trader who has gotten his background fairly laid and his knowledge of stock market theory and practice well in hand, however, the short sale, instead of being dangerous, is quite advantageous, in fact almost a trading necessity. No matter how versatile the trader may become, however, he will always do well to follow the elementary rule of placing either an actual or a mental stop to limit any possible loss on his short sale commitments.

The Stock Campaign

We have previously seen ² that every market transaction may be considered in two parts and that no transaction is complete until the second part is completed. In buying stock long the trader buys first and sells later. In selling stock short he sells first and buys later. This two-sided aspect is true of all individual trades, yet in a larger sense a successful "campaign" in any stock may include not one but many trades, each of them having its own double character. A campaign in any stock is almost always carried on by the active, or professional, trader. The investor who buys a stock for the long-pull and keeps adding to his line of holdings is also carrying on somewhat of a campaign in his

¹ See Chapter IX, p. 170.

² See Chapter IX, p. 164.

stock, but the term refers generally to a trading, or speculative, position usually held over a comparatively long period of time.

The stock campaign is the process of focussing a comparatively large portion of one's thought, analysis, interest and capital on an anticipated movement, generally of wide extent, in any single stock issue. The average trader is apt to scatter his resources among various issues, and the advantages of such diversification of risk have been too often recounted to need rehearsal here. The stock campaign is somewhat the opposite of such widespread diversification and is for use only by the semi-professional, or the experienced trader who is constantly on the scene of battle and can direct his forces to best advantage.

The fundamental necessity for a successful stock campaign is original analysis. This includes a broad analysis of all the many factors which we have studied, including the industry, assets, profits, prospects, psychology, market trend and other technical factors which we shall examine later on. Once convinced that a major movement is coming in any particular issue, however, the campaigner stakes a major share of his capital on that campaign, following the movement doggedly and taking every advantage at his disposal to realize the greatest amount of profit from that move.

Pyramiding on Paper Profits

Pyramiding is the most common technical trading method utilized in this process of a stock campaign. Convinced of the correctness of his position, the trader stakes all of his available resources upon that position. As the stock moves in the direction anticipated the trader's certainty that he is right increases, and his paper profits also increase on the original commitment. Pyramiding is the process of utilizing accumulated paper profits to widen and extend one's original position in that stock.¹

We have previously examined ² the technical details of the trader's margin account and have seen that the margin is the relation of the account's equity to the market value of the ac-

¹ See Chapter VIII, p. 157.

² See Chapter VIII, p. 152.

count's holdings. The original cash credit in the account remains stationary but as the price of the market holdings advances the percentage of margin increases. Since it is to be assumed that the original margin was sufficient to satisfy the broker, any increase in the margin is unnecessary. The additional credit, or equity, resulting from accumulated paper profit, therefore, may be used to extend one's previous position, so long as the margin is not reduced too much by that additional commitment.

As the campaign in a stock materializes, therefore, paper profits are used to form the basis of more credit with which to buy or sell additional amounts of the same stock, and this is the process called pyramiding. Just as \$1,000 of original capital will support perhaps \$4,000 worth of stockholding, so the addition of \$1,000 profit on the original \$4,000 worth of stock will sustain the purchase of another \$3,000 worth of stock. The profit of 25 per cent. on the original investment, therefore, is used as a basis for increasing the investment 75 per cent. Thus the practice of pyramiding results in rapid increase of stock held in any campaign, and of its potential profit.

It is perfectly apparent, however, that such pyramiding increases the risk involved, since a greater amount of stock is held without any increase in the original capital investment. In other words, if the stock reacts, not only the original profit is reduced but the margin is also reduced on the additional stock purchased through the previous paper profit. Reaction in the campaign stock under pyramiding operations is therefore serious and often-times exceedingly disastrous. Needless to say, pyramiding should not be undertaken without a solid background of experience and even then the trader should not become over-zealous. It is much safer to avoid "trading up to the hilt" and to let the margin expand moderately over the original figure, even while using the bulk of paper profits for pyramiding.

"Averaging Down"

Another trading operation which implies somewhat of a campaign is the practice of "averaging down." This method is in

more common use with investors as well as speculators and it follows the accrual of paper loss, rather than paper profit as in the case of pyramiding. Averaging is the term used to denote the practice of adding to one's commitment in any stock at more favorable price levels than the original commitment. Averaging, therefore, also implies a paper loss in that original commitment.

The trader may buy 100 shares of a stock at 100, watch it decline in market price to 50 and buy another 100 shares there. Thus he has 200 shares at an average price of only 75. This process is called "averaging down."

Pyramiding a Short Position and "Averaging Up"

Both pyramiding and averaging apply to the short side of the market as well as to the long. The trader may pyramid on his short position by using paper profits of the original short commitment to sell still more stock short.¹ The trader may also sell 100 shares of stock short at 50, watch it go against him to 100 and sell another 100 shares at that price, establishing thus a short position on 200 shares of the stock at the average price of 75. The latter operation is called "averaging up," instead of averaging down.

The advantages of averaging operations are well defined, but it is the author's theory that they are much overrated. Averaging is perfectly justified, and quite successful, given just one condition. That condition is that the original position is still sound. And that condition depends upon individual considerations which must be decided upon individual merits. If the trader is convinced that his original position is the correct one and that the unfavorable trend of the stock is merely temporary, then he is justified, of course, in averaging.

From its direct implication, however, it appears that the practice of averaging is unsound. The operation implies that, at least so far as the market is concerned at the current time, it has already indicated that the original position was not correct, for the stock has moved in the wrong direction. To just that extent

¹ See Chapter IX, p. 184.

averaging implies the tendency of stubbornness, or "bucking the market," and nothing is so disastrous as one's refusal to admit his mistake when the facts become apparent. In practice, the trader who can learn to see his mistake early and correct it, rather than cling to the original, and incorrect, analysis, is the trader who will be successful.

The author could present scores of tragic letters outlining cases where the practice of averaging has merely doubled, tripled and quadrupled the eventual loss which individuals must accept. Averaging is generally done by committing oneself to as much stock again as the original commitment, and it is not difficult to see how even only one of such moves can increase one's risk and multiply one's loss where the original commitment has been in error.

Averaging Operations are Illogical

The practice of averaging is insidious because it is natural from a psychological standpoint. The man who thinks a stock is a good buy at 100 is quite likely to think it a better buy at 75. He doubles his commitment. He is just as likely, if he is that kind of a man, to think the stock a splendid bargain at 50. He again doubles his commitment. But this reasoning is entirely false and incorrect. Even if there are no apparent reasons for the decline of the stock, the fact that it has dropped from 100 to 50 is almost a certain indication that something is wrong somewhere, that insiders, who know more than the public, are unloading, and that eventually unfavorable news will become public property to account for the decline in the stock's market value and show the trader's original analysis to have been unsound.

Instead of encouraging him to think the stock is cheap at 75, therefore, the drop to that price from 100 should put him definitely on guard. Rather than signal that the stock is cheap at 75, such a drop, under ordinary circumstances, should indicate that it was overpriced at 100 and is probably still overpriced at 75. In any case, the decline should put the trader sufficiently on his guard to refuse increasing his risk in a stock which is not acting

as his original opinions and analysis led him to believe it would act.

There is no particular reason why he should be "scared out" of his previous position if he still has faith in the stock, but he should figure conservatively that he already has enough in the issue and would be foolish to risk more. If his original reasoning was correct he will still get out of his original commitment without loss and without averaging. But if his original reasoning was not correct, then he is, of course, not justified in increasing his commitment merely to reduce the average price at which he holds twice as much of the stock as before.

Dangers of Averaging

There are literally thousands of potent examples of the disastrous results of such averaging operations. There are, indeed, as many examples as there are records of long and major declines in individual stocks. One example, selected more or less at random, will suffice. It is that given by a client who bought 25 shares of American Woolen common stock at $146\frac{3}{4}$ in 1920. The price began to decline soon after and the stock looked better to him at 120, so he bought 25 shares more there. At 100 the stock looked positively like a bargain to this man and he added another 25 shares at slightly below that price. He bought 50 shares more at 80 and another 25 shares at around 60. Then he finally wrote to the author for some information and advice.

He then had 150 shares of American Woolen common stock which cost him an average price of around 85. The stock was by that time selling in the low 40's. Under the circumstances it seemed the better part of valor to wait for a recovery rather than take his large paper loss, but he was finally restrained, with no little argument, from buying still more of the stock. He had brought his average price down from 146 to only about 85, it is true. But when his case came to the author's attention he had a paper loss of about 45 points on 150 shares, or nearly \$7,000. If he had been content to watch his fortune on his original 25 shares he would have had a loss of 106 points on only 25 shares,

or less than \$3,000. He would have been a loser either way, but his stubbornness in averaging down cost him an additional paper loss, to that date, of over \$4,000, or 130 per cent. more than if he had not averaged.

The practice of averaging has its definite advantages in certain instances, but the theory of the operation seems to imply its dubious character. In any case, each problem must be judged upon its own individual merits, and averaging operations should not be resorted to unless the individual is reasonably certain that his original judgment was then and is still correct, and that the unfavorable movement is merely a temporary one.

We have now become familiar with just about all of the important mediums of stock market trading and are well acquainted with the specialized type of order which results in special advantages in special cases. There is still one type of trading which, though it is somewhat of a bastard type, is sufficiently common and at least has sufficient public curiosity to make a short discussion justifiable here.

Option Trading

This is the general classification known as option trading, and it includes puts, calls, spreads and straddles. These are all specialized forms emanating from one basic idea. The idea is that certain firms will issue options good for a certain limited time in a certain stock for a certain sum. If the option becomes valuable through market changes during the option's life, then the holder cashes in on his ticket. If the option does not become valuable, then the holder does nothing. He is simply through with the transaction, being out only the price he paid for the option in the beginning.

Each option must, of course, have two parties, or there could be no transaction. The seller, or maker, of the option is usually a firm which specializes only in this type of business. The maker is the firm which stands ready to carry out the contract of the option. The buyer, or "holder," of the option is the individual who purchases the option from the maker and has the right to

demand that the maker carry out the terms of the contract, if it will be to the advantage of the holder.

The Put

A "put" is such an agreement through which the maker contracts to receive, if the holder wishes him to, a certain amount of a certain stock at a certain price within a certain time, in consideration of a price, or fee, from the option holder. Suppose that Mr. Angell decides that American Can common is going down but that he cannot afford the capital necessary to sell the stock itself, or that he would prefer to risk a small amount of money on the possibility, or take a risk on a larger amount of stock than he could by selling the stock short in the usual way. He buys from Doobyus Brothers, "Put and Call Specialists," a 30-day put on 100 shares of Can "10 points down" for \$100. If Can is selling at 145 the day the put is made, then the contract means that any time within 30 days Mr. Angell may deliver to Doobyus Brothers 100 shares of Can common and he will be paid 135 for the stock, no matter what the then current market price may be.

The advantage is apparent. If Can goes down, as Mr. Angell expects it to, more than 10 points in the next 30 days, his option, or put, becomes valuable. Doobyus Brothers stand ready to pay him 135 for the stock, and if he can buy it in the open market for 130 he may do so and make five points on 100 shares, or \$500 profit, less the \$100 he paid for the option, or a net profit of \$400 in 30 days. On the other hand, if Can goes up instead of down during the next 30 days, or does not go below 135, then Mr. Angell lets the option expire, the contract is dead and ended, and Mr. Angell is out only the \$100 he originally paid Doobyus Brothers for the option.

If the stock actually declined to 135, then Mr. Angell would have made more money by selling the actual stock short through the regular brokerage commission house channels. But this would also have involved the use of considerable capital, whereas all the capital needed for the option was \$100. Also, if the stock

had advanced instead of declining Mr. Angell by actually selling short would have lost \$100 more for every point it advanced over 146 (the sale price plus one point per share as the price of the option) than what he lost in the put. In other words, if the market advanced against him his potential loss by selling short would be infinite, while by buying the put his loss is limited to only the price of that put, or \$100.

The Call

A "call" is an agreement whereby the maker contracts to deliver, if the holder of the call wishes him to, a certain amount of a certain stock at a certain price within a certain time, the maker receiving in consideration for his contract a certain fee or price from the option holder. The call, therefore, is just the reverse of the put. It is used if the holder expects an advance instead of a decline in any stock. The call is made and executed exactly like the put. If Mr. Angell expected Can to advance he might have bought a 30-day call on 100 shares of Can at "10 points up" from the market, for a similar consideration of perhaps \$100.

If Can advanced more than 10 points from its then current market price of 145 during the next 30 days the call would become valuable. Mr. Angell could demand delivery of his 100 shares at the call price of 155 and then resell the stock in the open market at the higher level. If he were wrong in his deduction and Can declined instead of advancing, he would let the call expire at the end of the 30 days and be out nothing more than the \$100 he paid for the option.

The Straddle

A straddle is a combination of the put and call, involving both of those contracts at the same price. A straddle binds the maker to accept a certain amount of a certain stock at a certain price within a certain time, at the option of the holder, and at the same time binds the maker also to deliver the same amount of the same stock at the same price within the same time, also at the option

of the holder, for a stated consideration. In other words, the holder may during the life of the straddle either receive from or deliver to the maker the stock at the price named. He may do either one, or he may do both. If the stock goes consistently down he will elect to deliver the stock. If it goes consistently up he will elect to receive the stock at the price named. The exercise of one of the options in a straddle does not invalidate the other part of the contract.

If the stock goes rapidly down for the first 15 days of the straddle the holder might cash in on a profit by buying the stock at low prices and delivering it at the higher option price. If the market for the stock then suddenly reversed itself and ran rapidly up he might also make a profit from exercising the other portion of his straddle, by receiving the stock at the price named and selling it in the open market at still a second profit. It is exceedingly rare, of course, that both sides of a straddle become valuable.

The Spread

The price charged by the maker for straddles and spreads is generally at least double that for either puts or calls, since the former are doubly valuable. The option price of the straddle is always the same for both the put and the call side and is usually the approximate market price at the time of purchase. The difference between the straddle and the spread is simply that the price of the call and the price of the put differ in the spread, instead of being the same as in the straddle.

In all options when the option price is not placed at the market, as it is generally in only the straddle, the option prices are set in favor of the maker. In other words, the put price is set under the current market, the call price is above the market, and the same relation holds true in the put and call contracts of the spread. This is logical in order to give the maker a fair run for his money. It is almost certain that at some time within 30 days, or whatever the time limit of the option, the stock would be either above or below the then current price. The necessity for placing the option price "away" from the current price is therefore clearly

apparent, since the maker does not charge very much comparatively for the chance he takes. If the price away from the market were not placed generally in his favor, therefore, the maker would almost certainly be called upon to fulfill his agreement at some time during the life of the option.

The option is therefore a means of making possible profit out of the stock market without actually putting up much capital and without actually entering the market until a profit is specifically assured by such action. It sounds simple and like "easy money." In point of practice it is often profitable for the holder but is more often profitable for the maker, due to the failure of the stock to move as far as the holder expected it to and his resulting failure to present the option for fulfillment.

Objections to Option Trading

The chief objection to this somewhat irregular method of trading is that it is entirely too dangerous and speculative for the highest type of firm to handle. The successful put and call dealer must offer his options at a comparatively low price to make them attractive to the speculator. In order to do so he must bank on a fair amount of luck. Most of such dealers have their fees worked out fairly well on a basis of the average probabilities. But when the probabilities are upset the loss to the maker can be rather tremendous, to say nothing of being disastrous. The "upsets" in the stock market are so numerous that the put and call dealer is taking a tremendous chance in his business. He is taking more of a chance than the best and most conservative brokers are willing to accept.

If the business of selling options in the stock market at comparatively small prices is not gambling with fate, it is because the dealer is more thorough and more alert than most of them seem to be. The inherent risk attached to the business results in the fact that there seem to be more questionable firms in the field than strong and dependable ones.

The author does not mean to charge that all option houses are of dubious financial responsibility. He may say with consider-

able justification, however, that the field has in the past been the stamping ground for a considerable amount of fraudulent dealing. It is comparatively easy for the old-time bucket shop to go in for this form of gambling. Options can be offered at attractive prices, and the making firm has no responsibility so long as the natural lethargy of the general market keeps too many people from demanding exercise of their options. Options may be called at any time during their life, and it is the practice of some houses to eliminate any actual market trading by merely "paying up" when their options are called and settling for the difference without any exchange of stock.

Dishonesty in Option Trading

The ease with which such an option business can be handled so long as things run smoothly has naturally tempted many questionable firms into the game. When they have a run of bad luck, however, they either try to switch their clients into other options and win back their money, by merely giving them a "credit" on the firm's books, or go into the hands of a convenient receiver, or quietly fold their tents in the night and steal away like the Arabs.

The advantages of this form of trading from a theoretical standpoint are plainly apparent. In fact, they are too apparent. The risk is too great for the issuing house, in most cases. The best of the option dealers have their options guaranteed by some reliable firm which is a member of the New York Stock Exchange, and this guarantee should be insisted upon by anyone buying such options, no matter how strong the firm itself seems to be.

Guaranteed Options

Even the advertisement of such guarantee has not been proof of the reliability of all such option houses. There have been not a few notable failures in the past couple of years, despite the guarantee of stock exchange members. Such guarantee does not keep an option firm from going to the wall on its other business.

The individual who deals with such a house should demand that his option, with its guarantee by a stock exchange member, be in his own possession. If it is not, then his option may not be thus guaranteed, despite polite letters of the option firm.

If the guaranteed option is in possession of the holder, then it is still good even though the issuing house may fail, since the exchange member must still stand behind its guarantee. It is unwise to leave any very large credit balances with the average option firm, also, and in general the individual who chooses to do stock trading through purchase of options must watch his step most carefully, and, despite his greatest care, he is still running considerable risk, in most cases, of being eventually disappointed in his firm or the results of his trading.

The Option as a Legitimate Hedge

The more legitimate use of options is in hedging against possible loss on an actual market commitment, or in protecting profits already accumulated on paper, or by large traders who merely want to protect themselves either way. We have previously seen that the options are generally sold at "points away" from the market. They can also be made at the current market, though this is not often done, for a much higher fee is charged, of course.

The less reliable option houses generally send out flamboyant circulars showing the profits possible from such activity, offer special group selections, low fee prices and other attractions designed to encourage the inexperienced operator. No very definite lines of demarcation can be given for separating honest from dishonest firms, and in the final analysis the potential trader in this type of dealing should consult his banker, his own reliable broker, or one of the information bureaus regarding the option firm's standing and reliability before opening an account with it.

CHAPTER XXI

PRINCIPLES OF TRADING

Trading Implies Short-Term Operation

Although a trade in any stock implies merely an individual purchase or sale of such stock and might thus be the beginning or end of either long-pull investment or short-term speculation, the connotation usually given to the activity called "trading" in stocks is that of desiring to realize more or less short-term profit through market movement. The difference between speculation and investment we have already considered¹ and found to be largely a combination of the individual's aim in the commitment and the degree of risk involved in such commitment. The difference between investment and stock market trading is about the same, except that the principle of time plays perhaps a little more important part in it than in the differentiation between investment and speculation.

In the latter, time is one of a number of other elements. In judging the difference between investment and so-called stock market trading, the time element is by far the most important factor. The man who buys for investment does not expect his investment stock to fulfill all of his hopes and aspirations for it within a week or two. He buys to hold because the stock is good for the long-pull, because its fundamental factors are favorable — and it sometimes takes years to achieve the full effect of such fundamental factors in the stock market. The investor, therefore, buys to hold, and having once bought he does not usually sell and transfer his capital and his interests to another stock. Rather, he waits until he has accumulated enough additional capital to take on an additional investment, and thus the investor is not in the market nearly so often as is the trader.

¹ See Chapter II, p. 16.

As opposed to the stock investor, the stock market trader is satisfied to leave his capital in any one stock for gradual long-pull appreciation, for current interest or for true investment. He is much more interested in action—in the time element. He figures on getting into one stock just before it begins its move, getting out of that stock with his profit as soon as that move is over and then jumping his capital immediately into another stock which is just getting ready to move.

The theory of the market trader is perfectly logical, of course. Study of individual stock movements shows that the average stock is generally in a comparatively dormant state so far as market fluctuation is concerned. It may move a fraction every day but it displays perhaps only one or two spectacular movements every year. Such a movement may be over inside of a week or two. If it pays the long-pull investor to keep his money tied up in such a stock for a whole year just to get the advantage of that two-week movement, how much more shall it profit the nimble trader who can perhaps tell from his market studies just when in the year that move is coming. He can get as much profit in two weeks as the investor gets in a year. And if he can find other favorable movements to keep his capital working 12 months of the year in this revolving system, it is apparent that he will realize about 25 times as much profit in the 25 stocks whose short-swing movements he catches as will the investor who is in only one stock.

Advantages of the Trader vs. Those of the Investor

The practical catch in the theory, of course, is that the investor is fairly certain of getting his one movement since he stays in and waits for it. The trader, on the other hand, is not content to do this. His skill lies in judging correctly just what stock is going to move, when and how far. He thus takes many more risks than does the investor, and for that reason he often suffers loss instead of gain. But also for that reason his profits, when they work out correctly, are much larger than the investor's.

Whatever may be the comparative values of investment and

trading it must be said that trading requires infinitely more skill, more pains, ability, knowledge and practically all other qualities than does investing. As a result it is perhaps a greater challenge to the individual's ability. The very fact that picking out an investment stock is so much easier than picking a good short-term speculation is in itself an incentive to the latter course of market action, for it requires much greater ability along every line.

Perhaps the most definite differentiation between trader and investor is the time element. The investor depends upon the slow working out of fundamentals. The trader works much faster; must select stocks not only with favorable fundamentals but whose technical position indicates that the stock is about to move in discounting those fundamentals. Since technical factors work much more rapidly than fundamentals, it is only fitting that the trader should be chiefly interested in the former.

Technical vs. Fundamental Factors

As a matter of fact, the technical position of any stock is of utmost importance to the trader, even of more importance, quite often, than the fundamental position. We shall study such technical factors in greater detail in the next chapter, but for the time being it will be sufficient to examine some of the more important elements and rudiments of stock market trading, as differentiated from stock market investing.

We have seen in our previous studies that from a fundamental standpoint stock market action is generally in process of discounting something. It may be a change in business, in assets, in earnings, in popularity, in prospects, in sentiment, or any one of many other considerations which affect the value of stocks, but fundamentally it is always a discounting of the comparative future popularity of the stock in question.

All our consideration of the above factors is therefore merely to allow us to forecast the popularity of a stock at a future date and to take action at the present time which will yield us a profit through our own foresight, later on when the public in general

realizes the situation. By the time news regarding a stock is made public such news has generally been discounted in the market and the "cream is off."

Take the example of Kennecott Copper, which raised its dividend from \$4 to \$5 per share in June, 1929. At the beginning of the year the new stock was selling below 80. Copper prices had been advancing and continued to advance. The presumption was that Kennecott's profits were rising since business was also improving with the advance in prices. The fundamentals, therefore, indicated that when such profits became publicly known the popularity of Kennecott stock would be increased and its market valuation would advance. The dividend increase was generally considered a bullish factor. We know, however, that the real bullish factor was the increase in profits. But most of the advance in the stock from 78 to 105 came before the increase in earnings was made public. To this extent the market had already discounted the increase. The time to buy was at the beginning of the year before such increase had been publicly realized. When the dividend was actually raised in June the stock was already back in the 80's.

Discounting the Future

The next problem was not how much earnings had increased in 1928, but how much more they would increase in 1929. The future movement of the stock depended no longer on past results but on future earnings. And such future earnings depended largely upon the price of copper and the amount of business done. In April the price of copper declined sharply. To a large degree the price of Kennecott declined along with the price of copper. But the greatest profits on the short side of the stock went to the insiders or to the students of the situation who could forecast the price of copper and Kennecott's future earnings in advance of the time such factors would influence public selling. By the time the price of copper had declined and the dividend was raised Kennecott had dropped back from a high of around 105 to a price of below 80. Once more profits and not dividends were the chief

market factor. And the trader whose campaign in Kennecott was successful was the trader who could look far enough ahead to see what the public attitude would be toward Kennecott a couple of weeks or a couple of months from the time he took his own action in discounting that future popularity.

Selling When the Good News is Out

Somewhat the corollary factor to discounting the future is the process of "selling when the news is out." The latter follows the former. Since the nature of the general and individual market is to discount the future, its nature is also to stop discounting when the news is out — when the future has become the present. There are several theoretical angles of this occurrence, which is a fairly general rule. The truly big traders, the important operators, the professional students, all are the big factors in price fluctuations, prior to public participation. This is the "they" crowd in stock market parlance. "They" are the ones who discount the future. "They" influence the market action of the stock to a considerable degree.

If "they" have been buying the stock and advancing the price to discount announcement of favorable earnings, their natural gesture is to get out of the stock and take their profits when such news becomes public. They held the stock in anticipation of public demand. When the good news is out the public should theoretically, and practically does, step in and buy the stock — generally too late. The best time to sell the stock, therefore, is at the time when this public demand should appear. These important interests, who either have intimate foreknowledge, or accurate foresight, and whom we shall call the "insiders," have no further reason for holding their previously purchased stock. "They" have a profit in it and the logical time to sell is while the public is still buying on the good news. The result is the somewhat technical tendency for a stock to react, instead of advance, when a piece of good news comes out.

Conversely, if a stock has been depressed by the short selling of forewarned insiders prior to issuance of unfavorable news, their

short covering is likely to bring about an advance, rather than a decline, in the stock when such unfavorable news is issued. There are exceptions, of course, to this rule, as to all, and they occur at those comparatively infrequent times when the news has not been adequately discounted and when actual public trading more than offsets the profit-taking of the insiders. But the general lesson to be learned is that stock market profits from changes in popularity of the stock result usually from discerning and discounting the future. The "insiders" — the officers, bankers, etc., of a corporation — have the decided advantage in this foreknowledge, and that is why the average trader must study the action of the stock in order to get his clue to the inside action and determine whether the insiders are buying the stock or selling it. But to a fair degree, the trader can also draw his own conclusions from analysis of facts already known but not yet assimilated or thoroughly analyzed by the public.

Following the Crowd

This question of discounting the future and taking profits when the future becomes the present is bound up with the wider consideration of the advantages in "following the crowd." The distinction between following the crowd and taking profits on good news is a fine one and may be a bit confusing. In general, it may be said that when the future news is of a general character, in the form of a trend rather than one individual piece of news, then it is more profitable to follow the crowd. Other things being equal, a stock or group of stocks is likely to continue the movement already begun. If everybody seems to want to buy the copper stocks, then up to a certain point it is the better part of wisdom to buy the coppers, granted that prospects for the stock or group are improving.

Following the crowd is especially advantageous in group movements. Generally, stocks move on fundamental changes, if their basis of movement is sound. Future developments which start one stock up are likely to affect the particular industry as a whole, and the other members of the industry, or that particular group,

are likely to follow. Generally, also, there are one or two leaders in the group movement. It is well to follow those leaders, but an alternate course is to study the group and pick out one member which has not begun to discount the general group improvement, or has lagged behind in such discounting, for no apparent reason. Profits from such laggards are generally good, if caught in time, but they are more risky, owing to the possibility that the lag is due to an inherent but unknown weakness in the stock, and usually it is more profitable to follow the leaders.

Crossing the Crowd

There comes a time, however, when the trader should not follow the crowd but cross it. At the end of a long and sharp movement in any stock or group of stocks the advantage of such action is fairly apparent, for public enthusiasm generally carries the market to exorbitant extremes. But the other instance is more important and much more difficult to discern. Perhaps the best clue is once more that of fundamental considerations. It is best to follow the crowd when fundamental considerations for the industry, for the stock and for the group are improving and indicate that there is really something to the move. But it is best to reverse the action of the crowd and desert them, or play the opposite side of the market, when their action is based more on rumors, on prospects, on paper talk, on public gossip, on results of pool publicity, etc., than upon a genuine and fundamental *raison d'être*. Another clue is that when the resulting movement is sharper than usual and enthusiasm is higher than seems logical, it is also best not to follow the crowd.

At such times the very enthusiasm and sharpness of such a move should make the trader suspicious of its legitimacy, especially when he cannot find any very good basis for the movement. One of the fundamental considerations affecting the attractions of any stock is that its attractions shall not yet have appeared to the general public.

If everyone is talking about the splendid chance for profit in any one stock or group of stocks, if all the papers, all the services,

all the advisers seem to agree in recommending it, the chances are that it will not do as well as expected. At such times the chances are that prospects have been over-boomed and over-discounted, possibly through the instrumentality of pool publicity. In any case, the temptation for insiders to sell out their huge lines of stock on such unanimous enthusiasm is usually too great to resist, and after they have handed out their stock and supplied the buying desires of the public they are more likely to do whatever is in their power to discourage that public into selling the stock back to them at lower prices.

The author, recommending individual stocks for profit, often discards as many as a dozen possible recommendations in a single week, simply because public interest, enthusiasm and participation are too great. The stocks may look very good from other standpoints but this one element can wreck the technical future for any stock, at least temporarily, no matter how good its investment caliber or how strong its long-pull prospects.

Wait for the Ideal Situation

Right here a word may be said about the value of individual factors centering around any one stock and its analysis. No stock will be found which has all of its factors perfect. The only logical course is to learn from long experience what weight to give different factors in different situations, and then to pick the stock which seems to have the most favorable factors weighted in its favor. In either a bear or bull market it is almost always possible to find a considerable number of stocks which are either a pretty good buy or a pretty good sale. And it is only wise, if one stock has one poor factor to balance a number of favorable ones, to leave that one for another stock whose other factors are just as good as the first and which has not the one unfavorable factor to the degree present in the stock originally considered.

There is another very important time when it is utterly unwise to follow the crowd. That is in a case where some piece of news has broken between the close of one day's market and

the opening of the next, which news is broadcast throughout the nation and is bound to have a considerable reaction from the public. When the natural reaction of the public is thus very definitely discernible, the chances are usually that the market will do the opposite of what the public does. The rule has a fair basis in theory, since the public acts more psychologically and without due consideration, has not the means for correct breadth of outlook or analysis, is easily stampeded into concerted action and is also quite likely to over-estimate the true results of the news which actuates its course.

The "insiders," that powerful group of capable and wise and large operators who often control the destinies of the market, are more likely to see that the true significance of the sudden news is not so important as the public thinks, that there are other compensating factors which the public does not quickly grasp, or may simply realize the stampede of the public which will break the next morning and feel before it comes that the opening prices will more than discount the true importance of the news. They therefore take the opposite side of the market from the public, and the market action on the following day is almost directly opposed to what the public did and expected.

Openings and Overnight News

Perhaps the best example of such psychology is in the movement of the official rediscount rate of the New York Federal Reserve Bank, previously referred to.¹ In August, 1929, the bank raised its rediscount rate from five to six per cent. We have seen ² that fundamentally such action is detrimental to the upward movement of stock prices, but that such result does not necessarily take early effect. The public had been coached in the belief that the chief bugaboo of rising stock prices was the fear of such an increase in the bank rate. When it occurred the news was broadcast from coast to coast.

It was only natural to anticipate a flood of hurried and stampeded selling the next morning, since advance of the rate had

¹ See Chapter XX, p. 490.

² See Chapter XIX, p. 474

not been announced until after the close of the previous day. In the case under examination there were special mollifying factors, one being the bank's reduction of its bill-buying rate, but even without such factors it is probable that the results would have been similar. The public expected a big break the next day, but they made the mistake of not allowing for the fact that most of their confrères who wanted to sell would also sell at the opening. If they had followed our various rules, that news once out is unimportant, that the unexpected usually happens in the stock market, that in such a case it is very unwise to follow the crowd, they would have bought at the opening or at least have held what stock they had. It is too late to get out of the market after such bad news is common knowledge.

We have seen in the preceding chapter what happens when there is a flood of orders accumulated for immediate market execution (at any price) at the opening of a day's trading. The specialist takes refuge in a sharp spread from the previous close and opens the stock on huge volume to clear his books. The insider, the trader, the market student, all knew that the probabilities were strong for a very weak opening on the morning in question. They might also have figured quite logically that such opening would over-discount the bad news. Almost all of the rules of trading counselled buying rather than selling at the opening of that day's trading.

The market opened with declines of as much as 15 points from the previous night's close. But such prices were in most cases very close to the lowest levels reached. The market rallied almost immediately. Stocks had "passed from weak into strong hands," and the market advanced for many weeks into new high ground without getting back to the low levels of that morning. The lesson to be learned is not that an advance in the rediscount rate is not fundamentally unfavorable to the stock market — it is — but rather that in such a case, where mob action is quite certain, the technical factors overrule the fundamental factors, at least temporarily, and it is the better part of wisdom to buck the crowd rather than follow them under the circumstances previously outlined.

The Unexpected Usually Happens

Such considerations lead to the tendency for the unexpected to happen in the stock market. This is no more a rule than any stock trading rules, and it has many exceptions, but it is theoretically and fundamentally sound, and it works out in practice more often than not. The stock market is made up, generally, of two large groups, the insiders and the public. The insiders are by far the more intelligent, the more experienced, the more professional, with reference to market affairs. They make more or less a business of making money in the stock market.

It is not necessarily the case that one of these groups must lose in order that the other may win. But in perhaps the majority of cases that is what happens. In any case, the two groups are more likely to be working in diametrically opposite directions. When the insiders are selling stocks they are selling them to the public because they expect to buy them back at lower prices. The public loses if the insiders are right. When the insiders are buying stocks they are buying them from the public because they expect to sell them back to the public at higher prices. If the insiders are right the public loses again. Of course, the insiders are by no means always right. They often take losses, and when they do they are generally tremendously larger than the small losses that the public is likely to take.

It cannot, of course, be proven that the insiders are right much more often than the public, but it stands to reason that they are in better position to do the right thing than is the public. And, likewise, the insiders would hardly continue to give so great a portion of their time to their professional activities if they were not able to make average or fairly consistent profits at the end of successive years.

The Insiders and Market Profit

The author does not mean to give the impression that the public is constantly on the wrong side of the market. It cannot be, for it makes the market in large degree. The insiders

cannot pursue any course very long if they do not have public backing. In the majority of cases both groups, the insiders and the public, are making money. But where there is any sharp differentiation it is more likely that the insiders are on the right side.

And furthermore, it is important to be one of the insiders, or at least to know what they are doing, because it is that group which generally originates major movements. With better background, greater experience, more practice, and often almost unlimited resources to carry through a campaign, the insider group is very likely to begin discounting the future before the public. Once more, the author does not mean that one must be on the inside to make stock market profits. Far from it. The greatest estates have been built up merely by farsighted investment buying of stocks. But for successful market trading it is an advantage to have the facilities which insiders have.

The beginner may feel that because he is not the officer of a large corporation, not in the customers' room of a large New York stock exchange commission house, his chances for trading profit are dubious. That is not true. In general, it is true that the corporation officer and the customers' man have opportunities for getting information before it is generally known to the public and they thus have some advantages over the ordinary trader. But such "tips" often go astray, and it is by no means sufficient to rely solely upon such inside information in trading.

How to Become an "Insider"

As a matter of fact, the author uses the term "insider" to denote not merely this small group which has access to private information, but also to denote the trader who has made a study of trading methods, who is more grounded in fundamental theory and technical practice than the "man in the street." The trader, whether he be corporation president or office boy in a small Western town, whether he work in a New York brokerage office or as a farmhand, becomes one of the "insiders" as soon as he has taken a semi-professional attitude toward the market, has mas-

tered the rudiments of trading and digested the principles set forth in this volume.

The fact that he has done these things means that he is no longer buying and selling stocks "by ear" and in a casual way, as does the public, but that he is making a serious and studious attempt to make something out of stock market trading beyond a hobby or an adventurous risk. To just the extent that he leaves this hit-or-miss method of trading and puts true research, analysis and system into his trading, any individual leaves the ranks of the so-called "public" and moves into the group of "insiders."

Both of these groups are so large and the terms so inclusive that there is no way of drawing very definite lines between them. It is only facing facts, however, to disillusion oneself and admit that the inside group is more successful in stock market trading, in the long run, than is the public. That is one of the economic tendencies that justify the writing of such a volume as this. And the reason why the insiders are more successful is not nearly so much because they have inside information as because they have made a science of trading rather than a casual hobby.

Granted, then, that the individual is interested in the stock market for some reason more potent than curiosity, he should study to place himself in this group of semi-professionals. He is doing just that as he reads these lines, but in more specific fashion he must constantly study the action of stocks to determine, if possible, what these insiders are doing. By joining forces with these governing factors he allies himself with them and increases his chances for profit.

The Market Student vs. the Public

There are plenty of authorities who deny the claim that any such group as the "insiders" exists. They have in their favor the basic theory that the stock market is nothing more than an organized market place for the buying and selling of securities and that values are fixed by total supply and demand rather than by any group. The argument is logical as far as it goes. But in point of practice the author holds that the co-ordinated forces

which create that supply and demand work along the lines of the two groups suggested. Both groups have a very indefinite make-up, but from a theoretical point of view it seems possible to think of one group representing professional traders and students of the market, to the exclusion of the casual stock buying public.

From this standpoint, the more successful trader will be the one who is partly of the group of insiders because he applies systematic methods to the analysis of market movements, and partly because he is able to discern what action the insiders are taking and thus draw from such knowledge a hint of news and developments in the future which will not become public property for perhaps several months. This latter operation is chiefly observation of the more or less regular sequence of market movements which the trader will become familiar with as he studies the past and current action of the market in general and more particularly of the stock which is under observation. The study of this aspect of technical action also gives a clue to pool activities, which form a very important factor in trading analysis. If the trader can detect pool movements as they form he may "get aboard" and share in the profits which accumulate rapidly from such an organized movement. We shall discuss such technical movements and the methods of detecting them in Chapter 23.

Window Dressing Movements

Aside from the more technical considerations involved in each individual issue, which can be discovered only by study of that particular issue's market habits and formation, there are a few general principles which may assist in trading. There are, for instance, the conflicting tendencies of the market which occur at the close of the week, or just before a long holiday, as when the exchange is closed Saturday morning, and perhaps on the following Monday as well, due to some holiday falling on that day. From one point of view, there may be what is known as "window dressing" in the stock market, if the general movement is one of advance. Stocks are bid up strongly toward the close of trading,

to make a good impression on the many potential purchasers of stock who will have more time to read the financial reports and decide on their purchases over the long holiday than they usually have during the week.

Besides making a good impression and bringing in a flood of additional buying orders from the public on the next day's active trading, the inference is that the public will pay a little more for the stocks at such opening. Generally, when this happens, the insiders "feed out" their accumulated stock just about equal to the demand for perhaps the first hour of trading, after which, when the demand from the public has subsided, they continue offering their stock and prices react once more to their more normal levels.

Week-End Profit-Taking

As the converse of, or offset to, this tendency, there is the factor of week-end profit-taking. Especially if the holiday is to be longer than usual, there is a general tendency for the public, as well as traders, to take any profits they have and lighten their holdings for the week-end. The professional trader, especially, does not like to carry too much stock over such a holiday, for whatever news may break at such time is likely to be unfavorable rather than favorable. The trader is much more willing, for this reason, to hold a large short position over a holiday period than he is to hold a large long position. The news that may break over such a holiday period is much more likely to be of earthquakes, storms or sudden deaths than of increased earnings, new orders or other constructive material.

Such lightening of long holdings in a bull market is therefore likely to depress prices moderately before a holiday, and the movement is often accentuated by more or less casual traders who are leaving town for a business or vacation trip and do not care to hold their surplus stocks over this period. Of course, the natural sequence to such a movement is for stocks to come back again when trading is resumed after the holiday as such purchases are replaced. Our discussion has assumed that the major move-

ment is upward. The same thing applies if the major movement is downward, except that the "evening up" process would advance prices instead of depress them while window dressing operations would depress them instead of advance them.

It is quite apparent that these two tendencies are exactly at variance, and they are offered merely because they are both recognized trends in stock market movement. The reader, perhaps, must decide from actual observation which one, if any, to trust more often. Personally, the author does not think that either of them exerts any very drastic influence. Certainly, working for such opposing ends, neither of them is very reliable. One may work one week and the other the next. Of the two the writer is inclined to favor the tendency toward window dressing a little more than that toward holiday profit-taking.

Significance of Closing Prices

There is one factor which is perhaps a little more important than much of the Wall Street credo. That is the significance and importance of the closing prices for stocks in general and the more active ones in particular.¹ The active and best-known stocks are generally termed the "market leaders," and their course at any time determines in large measure the course of the "general market." During the five hours of regular trading on the stock exchange the "market" is generally moving either irregularly higher or lower. There are naturally many currents, but by and large there is usually detectable a fairly general tide, be it ebb or flow. The crowds which occupy the chairs in our leading commission houses are to be excused for their so-called indolence, for there is nothing more intriguing than to watch this ceaseless ebb and flow of stock market prices and to try to detect the first signs of faltering in one movement which may presage the turning into the next counter movement. And, incidentally, while it is not at all necessary for mastering stock market trading, the watching and study of this true market action, right at

¹ See Chapter XIX, p. 456.

the source, as it were, is splendid groundwork and a splendid school for the potential trader.

When one of these intermediate currents gets started in the course of a day's trading its own momentum carries it some distance. It may continue for many days with very little set-back but generally there are observable about anywhere from three to a half-dozen such definite alternating currents during a regular trading session. It is natural, therefore, to assume that if the market has lately developed a definite current just before the close of one day that tendency will continue into the next day's session.

The importance of closing prices is a little stronger than just that, however, due perhaps in large measure to the fact that the public, as it reads the record of the day's trading in the evening papers that night, will judge the day as a whole and the prospects for the future largely by the closing prices¹ rather than by the conflicting movements which have gone on during the earlier trading.

No matter what the definite reason, it is nevertheless true that if there is a well-defined movement on at the close it is more than an even bet that the next day's market is to be a speedy one, for the closing movement usually carries on in greater strength and for a longer duration of time than the movements which develop and pass out again during the course of the usual day's trading. This is especially true if the previous movements of the day have been erratic, irregular and without any very strong trend. In such case, a strong upward movement at the close is almost sure to presage a good day tomorrow, or at least a good morning.

The exception appears in the practice of window dressing, previously discussed. It requires more experience than book knowledge or theory to differentiate between window dressing at the close of one day's trading, which is not genuine, and the genuine late-day trading movement, which augurs for higher prices tomorrow. The best clue which we can give here is that window dressing occurs generally before a longer holiday and not just overnight, and also the previous point that the late move is more

¹ See Chapter XVIII, p. 447.

likely to be genuine if it is a fairly strong move, if it reverses the general trend of the day or if it follows a day of high irregularity, without any particular trend predominating.

Tides of the Day's Trading

There are various theories regarding these intermediate tides that sweep over the general market during the course of a five-hour trading day. One credo is that the best time to sell is at the opening, around one o'clock in the afternoon and just before the close, and that the best time to buy is about eleven o'clock and again about two o'clock. In other words, the trend is indicated as follows: a strong opening, reaction from perhaps 10:30 to 11:30 A.M., strength from about 12 until 1:30 P.M., further reaction from 1:30 to around 2:30 and a strong close at three o'clock. Personally, the author places little store by such a credo, believing that it leads one astray just as often as it proves correct and is therefore of little value. It is merely presented, therefore, as an interesting point for the reader to study if he cares to make his own observations.

We have previously examined the basis for what seems to be a much more certain and valuable trading point to remember. That is, that in the case of odd-lot orders with a definite price it is better to have them in before the opening of the market rather than afterward, if it appears that the opening may favor execution of the order. We have seen ¹ that in odd-lot trading it is a curious but none the less true custom of the odd-lot trader to use the opening price rather than the limit order price in case the former has placed the order into effect. In other words, in the regular course of trading an order to buy 25 Steel at $191\frac{1}{4}$ would go into effect when Steel sold at 191 in full-share lots, since Steel is a "quarter" stock. If the sale that put the order into execution, however, dropped the price directly to $190\frac{1}{2}$ the customer would still have to pay his limit price of $191\frac{1}{4}$ at any time during the day's trading after the opening sale. However, if this price of Steel at $190\frac{1}{2}$ came as the opening sale, then the odd-

¹ See Chapter X, p. 207.

lot customer would be charged only $190\frac{3}{4}$ for his stock. The rule works just the opposite in selling.

The resulting rule, therefore, is that limited buying or selling orders get chances of better treatment at the opening than after the opening. If it is a "close" opening the customer loses nothing. If it is a "spread" opening he stands to have his order executed at a more favorable price than his limit.

In the case of limited full-lot orders there is no such discrimination between the opening and post-opening transactions and such orders may be placed at any time, either before or after the opening of trading, with equal basis of execution. We have seen enough of the specialist's work to realize that full-lot buying orders are particularly advantageous if placed so that they catch opening execution when a much lower opening is expected, and the same is true, of course, of full-lot selling orders when a strong opening is indicated. Despite the definite tendency, this rule, like the rest, must not be depended upon to yield absolute or regular advantage, for all have their exceptions.

Some Wall Street Rules

There are various trading formulae and theories, all of them having more or less value but none of them to be accepted at face value, and all of them to be used merely as a basis for personal consideration and study through experience. One of the better Wall Street credos is, "Never sell a quiet market short." The rule applies with special force, of course, in a major bull movement and with even more force if prices have already had a considerable set-back. Quite often such a set-back is in the form of a sharp shake-out, so called because it is largely a technical reaction, due to the weakened condition of the market after a long and rapid advance, and is engineered and assisted by traders trying to "shake out" timid holders or novice buyers who are easily scared, as well as to catch stop-loss orders and bring about forced selling at lower levels through the exhaustion of weak margin accounts.

Such intermediate reactions in a major bull market are usually

drastic but seldom last very long, probably not more than a few days. Then "support" is encountered, such buying coming from banking and brokerage interests who are afraid to let their favorites drop too far for fear of permanently damaging public confidence in the major bull market. Such support is also assisted, of course, by the the profit-taking of short traders who have previously sold short and are likely to accept their quick profits at the first sign of such banking support by buying in their short stock to cover.

The Secondary Reaction

Wall Street usually expects that after a short recovery a "secondary reaction" will set in, due in part to scared traders who are merely waiting for a little recovery to sell out, and partly to the fact that stock acquired by banking interests for purposes of supporting the market and checking such a fast shake-out is merely for temporary holding and comes back on the market as soon as the decline has been checked. This secondary reaction may go a little lower than the first one, or it may not go quite so far. The latter picture is a much stronger one. The secondary reaction was fairly dependable in years previous to the last two or three, but in these latter years there has been a tendency for the market to forget such a secondary reaction and to come back fairly steadily from an intermediate reaction. In any case, the best sign that the reaction is over is a further sharp dip in the morning, followed by sharp recovery in the afternoon with total volume of sales for the entire day at relatively high level.

When the major market movement is downward, indicating that a major bear market is in progress, then approximately the opposite rules hold. The major movement is generally indicated by the long-term trend, with the averages moving in the major direction quite steadily but also rather gradually. The intermediate reverses of the major movement are generally much sharper than the major movement itself. In a bull market, therefore, the reactions are short and sharp. In a bear market the recoveries are likewise short and sharp.

In a sharp recovery during a major bear movement, the secondary recovery is not so noticeable and is more likely to be entirely absent. Or at least what secondary recovery there is does not bring average prices back to the higher levels of the original recovery. The end of the recovery is also signalled, however, by sharp advance in the morning, followed by renewed decline in the afternoon and on relatively heavy trading for the entire day.

The Resistance Point

In the case of an intermediate reaction in a bull market the decline will quite often establish levels of support. A support level is a comparatively narrow price range, anywhere from one to 10 points, below which the market, or the individual stock, does not appear disposed to move. A resistance level is a similar range above a stock which limits its advance. The formation of a resistance level or a support point may occupy almost any length of time, from one day to a year or more. The longer the time the level takes to form, the stronger is its indication that the next major movement will be in the opposite direction from that on which the support or resistance has been encountered.

The best picture in which is used the rule not to sell stocks short in a quiet market is when such support levels have been established after a sharp shake-out in a major upward movement. The market may hover near its low levels for a few days. If trading is still heavy, then it is quite possible that the reaction is not over. But if volume of trading shrinks gradually to lower levels with prices hovering irregularly about the support levels the chances are much more than even that the next movement will be a renewal of the upward trend.

When resistance levels are formed after an intermediate recovery in a major bear movement they are not nearly so dependable in indicating that the next move is to be downward, but they are still worthy of consideration. Likewise, the decline in trading at such time is also not so dependable but is likewise a fair indication that the buying power on the recovery has been expended and that the major downward trend is to be resumed.

The Support Level

The chart in Plate 75, on page 533, from February to September, shows a view of the theory that it is unwise to sell a quiet market short, especially after a reaction in a bull market and when support levels have been formed. It also shows a fairly common signal that such a sharp shake-out is to be expected after a fast run-up. The general market had advanced rapidly from 175 in February, 1928, to 195 in April of that year, and then hesitated, with considerable irregularity and some false starts in both directions. The stage was thus set for the shake-out. Its appearance was signalled when prices broke below 194 on May 22nd.

Thereafter, resistance levels were formed between 180 and 185. There was support at these levels and a moderate secondary reaction to around such support levels. If trading had remained active the picture would have indicated further decline, but it fell off considerably in June and July, indicating that the advance would shortly be resumed, which occurred in August.

Arbitrage Operations

No discussion of trading would be complete without a word regarding arbitrage operations. Such operations are for the more advanced student or trader, for they present technical dangers which can only be avoided by complete familiarity with the market as well as technical conditions. The process of arbitrage is nothing more nor less than the simultaneous purchase and sale of securities basically equivalent but temporarily available in the open market at different values.

Arbitrage operations generally result from capital split-ups, the issuance of rights and corporation mergers through exchange of shares on a definite exchange basis. During the past few years such corporate recapitalization plans have been particularly numerous and the practice of arbitrage has also become resultingly more popular. The principle involved is generally that the new stock resulting from the exchange of old shares may tem-

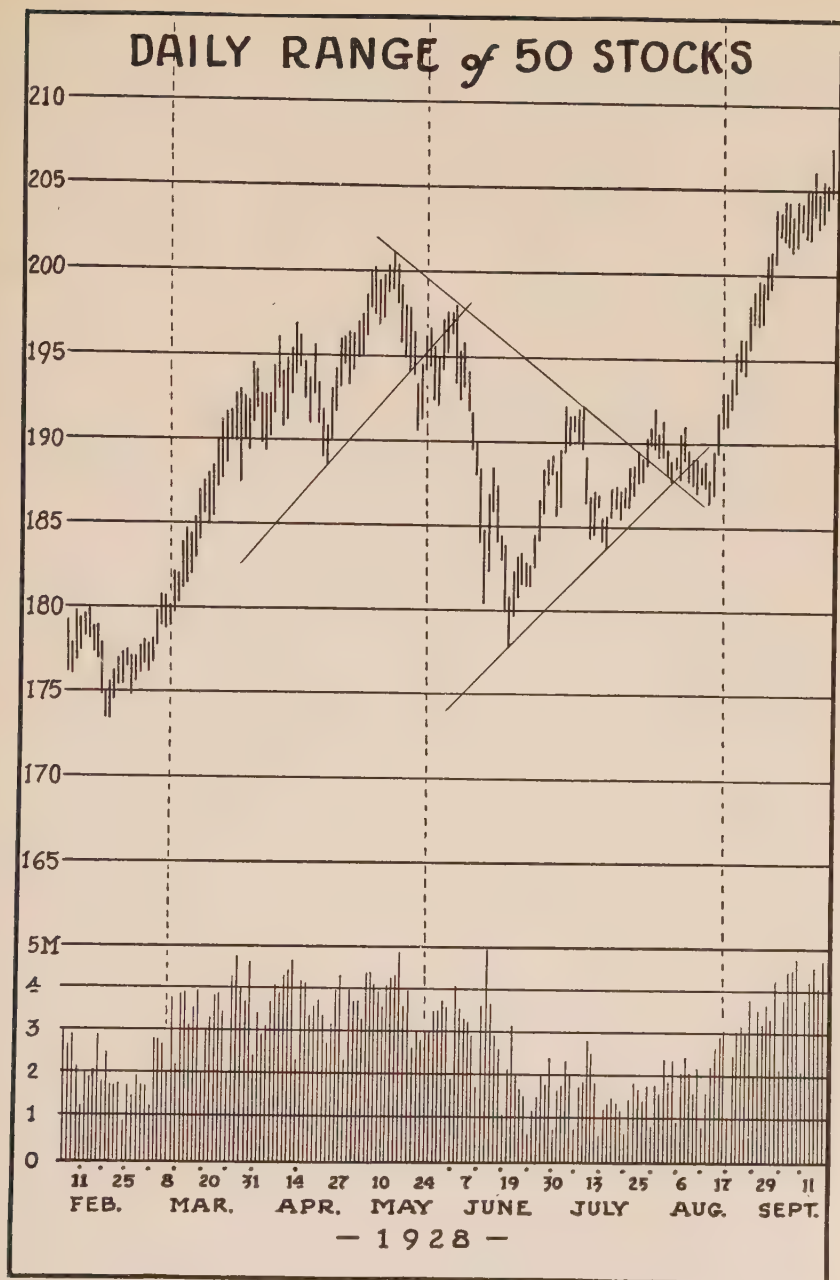


PLATE 75. CLOSE-UP OF THE MARKET. DAILY, FEBRUARY TO SEPTEMBER, 1928

Showing the daily range of 50 railroad and industrial stocks, as reported by the New York Times, or Annalist, average, with daily volume of sales as reported by the N. Y. S. E. Note irregularity which preceded the two major reversals.

porarily sell at a comparatively higher price than the equivalent number of old shares. Theoretically, this should not be the case, but due to technical conditions, often rather involved, it sometimes happens and the basis is thus laid for arbitrage operations. Often such disparity is merely the result of greater public demand for the new stock because it sells at a lower and thus more popular price than the old shares.

An Example of Arbitrage in Split-up Stocks

A simple example of the split-up type of arbitrage was afforded in May, 1929, when Woolworth proposed to split up its old stock on a $2\frac{1}{2}$ for one basis. The company thus planned to exchange $2\frac{1}{2}$ new shares for each old share. The old shares were selling at around 212 while the new shares sold at around 88 on a when, as and if issued basis. It is readily seen that $2\frac{1}{2}$ times 88 is 220 instead of 212. The old stock was therefore selling too low and the new stock selling too high, though they were to all intents and practical purposes equivalent securities, $2\frac{1}{2}$ shares of new stock being equivalent to one share of the old stock. The arbitrage thus consisted in selling $2\frac{1}{2}$ shares of the over-priced new stock short for every one share of the under-priced old stock purchased to protect or cover the short sale. The arbitrage would result in a theoretical profit of eight points for every $2\frac{1}{2}$ shares of new stock sold or for every one share of old stock bought to cover the short sale.

The arbitragist would thus be short of $2\frac{1}{2}$ shares of the new stock until such time as the exchange could actually be made. He would then turn in his one share of old stock and receive in exchange the $2\frac{1}{2}$ shares of new stock with which to make delivery on his short sale and close the trade. From gross profits on such an arbitrage operation the deductions are those for commissions, interest and taxes. The practice of arbitrage offers an attractive medium for high profits on large capital investment over a comparatively short period. If a good arbitrage is discovered the resulting profits may be very high, especially if the transaction is conducted through the use of margin or credit.

Actual examples of such arbitrage, as well as the operations resulting from stock offerings, exchange of merger shares and the practice of hedging, will be found in Appendix I, on page 824.

Dangers of Arbitrage

Despite the high rate of profit available on good arbitrage opportunities in a comparatively short time, there are many dangers. Perhaps the chief one is misunderstanding or misinterpreting of the original transfer announcement. The arbitrage is usually most profitable immediately after an announcement of exchange of stock by the corporation, and such announcements are often a bit indefinite or may even be changed at a later date, leading to serious loss if the terms are less favorable than the trader originally calculated. An example of such danger came to light in the summer of 1929 when Ford Motor Company of Canada, Ltd., split up its old stock 20 for one.¹ Hasty arbitragists overlooked the fact that 19 shares of the new stock were non-voting Class A, while only one share of the 20 was the voting Class B stock. There was an ostensible spread of 80 points, but the arbitragist who bought one old share and sold 20 new Class B shares was sold into a trap, for the Class B sold up sharply and many were forced to cover their short sales at losses of as much as 100 points per share of Class B stock sold.

Other sources of danger in arbitrage operations include the possibility that the proposed plan will not go through, will not be allowed by the Government, or that actual exchange of the stock will be delayed for a long time. Different degrees of marketability for the two equivalent issues also may cause loss, as well as the possibility that the collateral position of the old long stock may be impaired by the pending exchange. As has previously been stated, the dangers of arbitrage are many, and even though the possible profits are large the practice should not be undertaken except by careful and experienced traders.

¹ See Chapter XIV, p. 339.

CHAPTER XXII

TAKING THE WORRY OUT OF STOCK TRADING

Apologia

The title of this chapter is in itself somewhat of a presumption, for the author has never found for himself, nor knows of anyone else who has found, any sure and certain method of making profits out of the stock market without giving to it a good deal of thought, care, time and not a little worry.

Rather than be accused later on of misrepresentation, therefore, it may be well to disillusion the over-hopeful reader at the very start of this discussion. There is no secret passageway to stock market profits without effort. We can offer no "Open Sesame" which will unlock the doors of the treasure house.

What we hope to do, however, is to present a discussion of various methods for reducing the risks of stock market trading, limiting losses, calculating successful formulae and, in general, to help the trader himself in guarding against the mental upsets which may eventually come from aimless, hit-or-miss methods and their attendant strain upon the individual personality.

A Wall Street Formula

One of the "old rules" of Wall Street trading, especially in a bull market, is to "take your losses but let your profits run." It is hardly a rule and there is much to be said on both sides, but in general it is worthy of serious consideration. The theory is that if the trader gets into a stock that declines instead of advancing in a major bull market it cannot be a very good stock, there must be some hidden reason for its decline, that decline may well go further, and he is better out of it and into something that is acting better. One stubborn streak which leads a trader to

hold on to a poorly acting stock may eventually wipe out the profits on many successful trades.

On the other hand, if the trader gets into a stock that is truly going up in a bull market a few points profit is not enough and there is no telling how high it may go. Thus he should "let his profits run." The most satisfactory method of limiting any losses to small proportions, of course, is to protect the purchase by a stop-loss order. Such orders must be placed after studying the normal past action of the individual stock, but they are generally set from three to six points below the purchase price. The trader therefore knows that if he is wrong he cannot lose more than the number of "points away" from purchase where he has placed his stop order, whereas if the stock advances he is constantly accumulating paper profits.

The objections to the rule are that many a day in any bull market sees bear traders "gunning for stop-loss orders." That is, they take advantage of this trading rule and pick on one stock after another, which they strong-arm into a sharp decline. As the stock declines its lower prices catch the stop orders below the market, the automatic selling of these stocks depresses the issue still further and the bear traders cover their short sales on this further decline. Thereafter, of course, since the dip was only technical and temporary, the stock rebounds, but the trader who had his stop-loss order caught has lost his position in perhaps a very good stock.

Disadvantages of the Stop-Loss Order

The same thing applies often to a stock, generally under pool manipulation, which has formed a strong basis for a major advance. Just before the advance begins the pool is likely to engineer a short but sharp "shake-out" of perhaps only a couple of points in the particular stock, regardless of general market action, merely to dislodge such closely stopped stock holdings and get them for the pool account just before the movement is reversed and the stock begins its long major upward movement.

Another disadvantage of the stop-loss order, of course, is that

the customer is quite likely to get less than his stop price for his stock, since in full-lot orders the stock cannot be sold until the sale following the one that puts it into effect.

Despite these apparent and sometimes serious disadvantages, the author is a firm believer in the specialized use of the stop-loss order for long buying as well as in short selling. Use of the stop in short selling has already been explained¹ and needs no further argument. In the case of long buying the stop-loss order is often advisable merely because it places stock market trading on a more scientific and systematic basis if for no other reason. It goes far to avoid the hit-or-miss methods of the casual purchaser, for the stop-loss buyer knows exactly what it will cost him if he is wrong. It is an automatic guarantee that the purchaser will "look before he leaps" and count the cost of a misstep.

Advantages of the Stop-Loss Order

The stop-loss order in long buying also means that the trader can keep a more adequate check on the success of his methods. If he uses the stop in all his commitments, then he limits his losses to a certain amount in each transaction. If he takes a little higher profit in his successful transactions, then his trading account will show steady profits, on a businesslike basis, if he is right even only three times out of five. If he is not right in that proportion over a fairly long period, then he should conclude that he is not a good trader, has not had sufficient training or should discontinue trading, at least temporarily.

The trader will suffer many cases of "hard luck" and many discouragements by following this rule. He will find, through long study and detailed analysis, a sterling issue with splendid prospects. He will take his position, place his stop-loss order, see the price decline just far enough to catch his stop, sell him out and destroy his position in the stock, and then see the movement reverse quickly and the stock go right on up for 20 or 30 points profit, as he had originally planned.

Such occurrences are unfortunate and there is no way of ab-

¹ See Chapter XX, p. 496.

solutely avoiding them. They can be softened, or made less numerous, by placing the stop order well away from the purchase price, by studying resistance levels and placing the stop below such prices, and also by quickly buying the stock back when it is seen that such an unfortunate occurrence has taken place.

When it does happen, however, the successful trader will take it merely as one of the "fortunes of war." If he has placed his stop correctly he may be content by knowing that the stock did not act exactly as he had expected anyway or his stop would not have been caught, and he is thus "well out of it."

Stop-Loss Order as Protection Against Stubbornness

However, in spite of these disappointments which the practice of stopping long purchases may bring at various times, it is still a good practice. We have seen some of its good points previously. From a practical standpoint it also does away with worry over a wrong position, to say nothing of eventual large losses. There is nothing so damaging to the trader's morale as to take a wrong position in a stock, hang on with hope for a while until it declines too far for him to abandon his position with mental comfort, and thereafter hang doggedly on, watching paper losses mount higher and higher, hoping against hope for a recovery which never comes, having his capital tied up for perhaps years or else finally taking a staggering loss which wipes out many smaller profits on successful trades.

One such occurrence can warp the trader's judgment so decidedly that he may make other mistakes, can unfit him for calm and sure trading for some time or may even ruin him for life, either mentally or financially. The surest way to avoid this greatest danger of stock market trading is the use of fairly close stop-loss orders on all commitments, long as well as short. The occasional disappointments which the practice brings are not serious, and they are as nothing to the devastation of one huge loss on such an incorrect campaign as we have outlined above.

The practice of stopping losses and letting profits run needs

another corollary, however, to complete its successful theory. The rule is good because it places limiting losses on an automatic basis. But it does not do the same for acceptance of profits. Naturally, it is unwise for the trader to let his profits run indefinitely. Such action would be contrary to the fundamental element of trading, which calls for completion of any campaign in a short or limited time. So long as profits promise further accrual it is perfectly logical to let them run. But stocks do not go on up forever, and there must be some time when such profits should be accepted and the trade closed. It seems only logical to place a definite limit on the degree to which the trader will let his profits run.

A Formula for Accepting Profits or Losses

This corollary is based on the general formula that by taking a position in any stock the trader may decide beforehand exactly what he is going to do. He may decide to take a five-point loss or a 15-point profit. He may decide to take a three-point loss or a 10-point profit. He may vary the formula as he likes but, counting commissions, taxes and incidentals, the ratio of a three-point loss or a five-point profit is about the limit of profit on which successful trading may be expected.

What seems a still more satisfactory method of placing the acceptance of profits on a businesslike basis is the placing of stop orders a few points under the current price of the stock after it has already advanced. This is called protecting profits with the progressive stop and is a very useful corollary of the practice of limiting losses. If the commitment is unsuccessful the trader is out of it with a small loss. But if the commitment is successful and the stock advances the trader may protect his accumulating profits by stop orders.

Protecting Profits with the Progressive Stop

Let us suppose that the trader buys his stock at 100. He limits his possible loss by placing a stop-loss order at around 95. His

commitment is successful, the stock does not decline to 95 but advances to 110. He may now place another stop order to sell his stock at 108 stop, and cancel his previous stop-sale order at 95. He is now assured of at least eight points profit, come what may. He still expects the stock to advance further or he would sell out at the market instead of protecting his profit. If the stock does advance further he may continue to move his stop higher, always keeping it a few points under the new high. Thus if the stock advances to 120 he moves his stop order to 117, assuring himself of at least a 17-point profit. If the stock does not react to catch his stop, but goes on up to 130, he again advances his stop to perhaps 126. This practice of using the "progressive stop" is one of the most logical ways of protecting profits. It is also a very valuable corollary of limiting losses and letting profits run, for it places acceptance of trading profits more or less on a basis just as scientific, just as automatic and just as businesslike as limiting losses.

The Formula System vs. the Progressive Stop

The author recognizes both the formula method and the policy of the progressive stop as highly valuable, perhaps the two most valuable trading methods in use. He inclines toward the progressive stop order, however. In the first place, the formulae do not always yield a profit under the circumstances of the trader being right three times out of five. Quite often the stock will show a profit of a fraction under the price at which profit would be accepted and then reverse its movement to catch the original stop-loss order, thus resulting in a final loss instead of a possible satisfactory profit.

Moreover, the formula method is a little too automatic to suit the author, or to suit the trader who is anything more than an automaton. After all, no rules can be formulated which are always correct. No formula will always work. No trader can allow judgment a permanent vacation. After all is said and done, the rules which are here presented are presented chiefly as a guide, as a background for trading. Their study and use must

be mellowed with actual experience. The trader must know when to use one principle and when to substitute another, and only experience, study and the inborn genius of a successful trader can bring such factors to satisfactory fruition.

The stock market can never be made automatic or its theoretical value would be destroyed. No iron-clad theory to "beat the stock market" has ever been developed and none ever will be developed. Successful trading depends upon study and experience but also upon personal judgment, and the successful formula is therefore not a formula at all but a course of action which allows personal judgment fair play. For this reason, if for none other, the author favors the policy of the progressive stop as against the practice of the formula previously outlined, of accepting a certain loss or a certain amount of profit, whichever appears first.

Buying at Support Levels

There is one point, however, which needs further treatment in connection with avoiding the disappointments of having stop orders caught in long purchases. This is the practice of buying only at support points, and it affords a much better background for the trading profit-or-loss formula than otherwise. We have previously seen that a resistance level on the up-side, or a support level on the down-side, is a comparatively narrow price range through which the stock, or the general market, does not seem disposed to go. We shall have more to say about such support and resistance levels when we are studying market action by charts,¹ for it is there that resistance points are most easily observed.

It may be noted, however, that some stock has been tending generally upward but has lately had a reaction from its high of 100 to current levels of, say, 75. Suppose that the stock recovers to 90, reacts to 77, recovers to 85, reacts to 74, recovers to 80 and reacts to 75, as shown in the accompanying chart, Plate 76. The limit of the recoveries has not been regular but the limit of the declines has been confined to the support level of around

¹ See Chapter XXV, p. 640.

75. When such a support level is observed it presents a good opportunity to use the profit-or-loss formula. The stock may be bought at around 76, with a stop-loss order at 72. The formula may then be that the trader will either lose four points or win 10. He puts in a coupled order to "Sell at 86 or 72 stop. Coupled. G.T.C."

He may feel fairly sure that the stock will not sink below its support level. If it does he should be glad to be out of the stock,

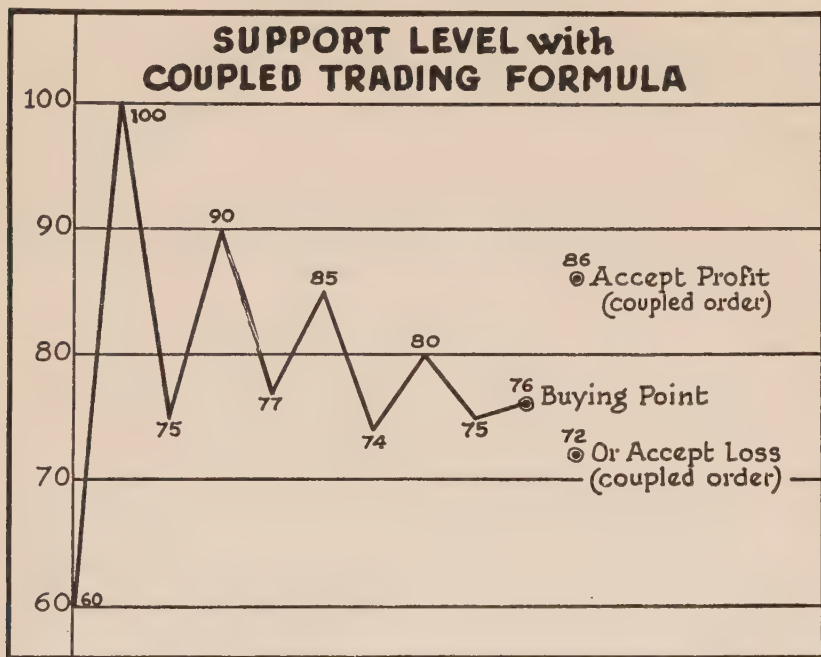


PLATE 76. GRAPHIC ILLUSTRATION OF COUPLED TRADING

Best used near a support level, as indicated. Buying at 76, the trader places a coupled order to sell at 86 or 72, whichever is reached first. He will take either a 4-point loss or a 10-point gain.

for it would not be a good sign. On the other hand, it is probable that if the stock does not go through its support level on the down-side it will advance to a point where he can accept his formula profit. Of course, if he can do this three times out of five he will make money. The principle of studying resistance

points makes the profit-or-loss formula more valuable but it is still a bit too dangerous and automatic to be considered a consistent friend.

Limits of Profit and Loss

Of course, the support level may be used successfully in any type of trading. On theoretical principles, however, it would not be good policy to accept a smaller profit than the limit of possible loss, since the odds would then be definitely against the trader. But profits may be accepted at any time such action is wise in the trader's opinion. He may play for a five-point profit or a 10, may use the progressive stop to protect profits or may merely take such profits when the advance seems to have gone far enough. Once more, the method of using one's own judgment rather than depending upon absolute formula is probably most satisfactory from the standpoint of the serious and semi-professional trader.

It is to be hoped that by this time the reader will see that there are too many rules of stock market trading to learn by rote, that none of them are absolute rules, that they are merely bases for departure, that the potential trader must devote constant study to an almost limitless series of considerations, must know the action of stocks from constant observation over a long period of time and must have the mellowing background of a great deal of practical experience, before he can hope to enter the ranks of successful stock market traders. Even the old-timers, even the experts, even the professionals are constantly looking back at their last transaction and saying to themselves, "What a foolish thing I did. But I've learned a lesson and will know better next time." Whether they actually have learned their lesson is not so important as to know that there is always something more to be learned in stock market trading and that successful traders are not made in a day or entirely through the perusal of a volume on stock market trading.

If the potential student or the potential trader is wise he will restrain his enthusiasm, will make a business of his study and will

prepare himself through long observance, before he risks his capital in trying out his ability in actual practice. The most logical and most satisfactory medium for testing one's ability is the practice of "paper trading."

Testing Market Ability Without Financial Risk

Paper trading consists in the practice of keeping an actual and truthful record on paper of one's trades in the stock market, just as though they had actually been executed, but without actually dealing in the market or risking any capital in the trading. The success of paper trading, not financially, but for the actual test of one's ability, depends upon absolute truthfulness with oneself. Never make an entry after the results of such entry are known.

If the trader decides that American Can is a good buy he enters the order to buy Can exactly as he would give it to his broker with the exact date when the order would be given. It is more satisfactory if such trades are decided upon and entered while the market is closed, for then the opening price the next morning can be entered as the true purchase price (making allowance for fractions on odd lots), whereas if orders are entered as during the day it would be difficult to find just what price would have been paid for the stock.

If Can opens the next morning at 145, then the paper trader enters that price in his record and it shows that he bought 100 shares of Can at 145 on the day designated. When he decides to sell he again enters his order in the personal record just as he would give it to his broker, "Sell 100 Can" at the market, or in any way he cares to limit the order. If it is a market order then he enters the price at which Can opens on the following day and can figure his "paper profit" or his "paper loss" just as though he had actually been trading with a broker and risking his own capital in the open market.

In the interest of absolute accuracy and fairness with oneself, it is more satisfactory, of course, to figure commissions, taxes, etc., in the record, also, but this is not absolutely necessary, since the paper trader can make fair allowance for such commissions in

calculating his paper profit or loss at the end of the week, month or over whatever period he decides to test his trading ability. In paper trading any type of order may be given — short sales, the various limits, stops, etc. — just as though actual trading were being carried on. The only provision is that the paper trader must be absolutely true to himself or the value of such paper trading is *nil*. And if he cheats it is only himself that he is cheating, for when he begins actual trading with his broker the opportunities for cheating disappear very quickly.

Paper Trading

For instance, if the paper trader enters his order to buy Can at 145 G.T.C. instead of at the market, he must not consider that order executed until Can has declined to that figure, or below it, in case he is trading in odd lots. If Can declines to $145\frac{1}{4}$ and then reverses to an upward movement carrying it to 160, the paper trader might be tempted to stretch a point and consider that he bought the stock at $145\frac{1}{4}$. But he would be unfair, and unfair only to himself, if he did so.

Likewise, he might be considering the purchase of Steel but neglect to enter such purchase order in his paper record. If Steel advanced five points the next day it would be a temptation to say, "Well, I really meant to enter the order but didn't get around to it," and take the long position at the opening just as though the order had actually been entered. Once more, the paper trader would merely be defeating his own purpose and would utterly destroy the value of paper trading, in checking his actual ability at stock market trading before actual capital is risked in the market.

The fact that paper trading yields a good paper profit in one week, or in one month, should not be taken as conclusive proof that the subject is already a successful trader. Paper profits have a habit of looking very good for a while and then taking an alarming slump. The previous original profits must then be laid at least partly to "beginner's luck." Be the science or ability to trade ever so great, there is always this element of luck included

and full allowance should be made for this fact in paper trading. A week of the paper trading test is by no means conclusive. A month is better, especially if the paper trading has not been active. But two or three months of paper trading, serious and honest, is not too long a time to spend in this most valuable test for the beginner. Cutting the time short because there are nice paper profits will not cheat anyone but the individual himself.

Calculating Ability from Paper Trading

At the end of a few months, however, the paper trader will not only have a good idea of his comparative success, his ability as a practical trader, but will also have acquired a great deal of useful knowledge and experience which will stand him in good stead when, as and if he actually enters the open market and risks his own capital in the market. Making due allowance for commissions, taxes, etc., it will be simple to decide whether the paper trading has been profitable or unprofitable, and the potential trader may thus decide on a more or less scientific basis of actual test whether it would be wise for him to take up the practice of actual market trading.

If his paper trading record shows a loss he need not be discouraged, but he should not try to make excuses for himself. He should merely understand that he has not had sufficient experience, study and training and that continuation of all these, meanwhile getting further experience from his paper trading, may yet make his entrance into market trading justifiable from a financial standpoint.

On the other hand, if he continues to show losses month after month in his paper trading it may be the best thing for his bank account and his future if he does gradually get discouraged and loses interest in the process. Such failure as a trader is not a death blow to stock market ambition, for the road of investment success still lies wide open, and probably more permanent and large fortunes have been made, and kept, through stock market investment than through stock market trading or short-term speculation.

On the other hand, if the paper trader shows good profits fairly consistently over a few months he should not get over-confident. That is why a long test is much more advisable than a short one. Nor should he immediately risk a large amount of capital in actual trading. He may begin to trade, but let the beginning be small and slow. Let confidence come with time and it will be much better justified and much more likely to be permanent. And the neophyte trader should be careful not to over-trade or over-extend himself at the beginning. He should never do so, as a matter of fact, but the warning is particularly applicable to the new trader. To avoid forming bad habits and to keep the risk low, it is much better to trade on paper in no larger lots than one would negotiate in actual trading. Since no money is being risked, it is a temptation for the paper trader to deal in lots which his actual capital could not handle. It is much more advisable to carry on paper trading in exactly the same way as one would carry it if he were actually dealing through his broker and risking true cash.

Avoid Over-Confidence

One more word about over-confidence may also be in place. Especially during long bull markets, men and women, young and old, flock to New York or to their local brokerage houses with enthusiasm and confidence of a fortune overnight. They are to be likened to the movie-struck girls who flock to Hollywood. Perhaps one in a thousand actually makes good. The rest are finally disillusioned, and the best that they can do is to return to their own business as quickly as possible, even though they must swallow considerable pride in doing so.

No matter how successful the potential trader may be in his paper record of trading, he should dismiss the usual and natural ideas of a quick fortune in Wall Street. The odds are very much against him. Eventually he may develop into a very successful trader, but in perhaps not more than one case out of a thousand is he justified in giving up a good position somewhere to come to New York and try his hand at professional trading.

Successful Trader Need Not Be in New York

If an individual is going to be successful at stock market trading he does not need to be in New York. He does not need to be in any brokerage house. He can conduct his actual trading in his spare time, just as he did his paper trading. And it is not only unnecessary, but very unwise, for anyone to desert his economic place in the world to rush into Wall Street merely because he thinks he can make more money in stock trading. It is unnecessary to ramble through the history of broken-down professionals and some of the tragic ends of such enthusiasm. Stock market trading offers a splendid medium for profit, for a worth-while hobby and a healthy outside interest. But it does not necessitate cutting the ties of home, family, friends or business. All it requires is patience, study, conservatism and moderation.

The Psychological Aspects of Trading

No discussion of trading would be complete without consideration of the psychological aspect of the stock market and the stock market trader. We may leave consideration of general market psychology partly for a later discussion in connection with long-swing market movements,¹ but we may consider briefly the effect upon trading success of personal psychology of the individual trader.

The very definition of trading presumes a calm, cool and collected state of mind and a comfortable psychological condition of the trader. Stock market trading presumes a much more studious, much more businesslike and systematic attitude toward one's market activities than is found in the casual and popular type of market operation. The trader must be in complete control of his own situation in order to be successful. He must be in control not merely of facts and figures, of his own analysis, his own conclusions and his own plans of campaign, but, above all, he must be in complete control of his natural processes of reason-

¹ See Chapter XXVI, p. 669.

ing, judgment and logic. When any of these conditions becomes abnormal, the trader will do better to postpone his activities. Out of a wide acquaintance of professional traders, the author knows that by far the majority refused to trade at all during the Stock Market Panic of 1929. Conditions were too hectic and abnormal, and they simply refused to risk their nerves or their capital.

Trading also implies the risk of comparatively large amounts of capital, and the results of a wrong decision, or a campaign gone astray, are therefore more serious and more likely to upset the trader's psychological attitude. We have previously indicated ¹ examples of the devastating effect which large paper losses can work on the mind and physique of the trader who has allowed himself to "get in too deep." No one who has had very much experience in the stock market, perhaps even in only casual trading, needs to be told of that mental anguish, that psychological chaos and complete demoralization of judgment which can come to the individual when he sees himself laid open to seemingly disastrous loss in any unfortunate commitment.

The Psychological Upset

We need not stop to analyze the reasons for such psychological upsets. They are fairly plain. But it should also be plain that no individual can trade successfully if he is in such an upset mental condition. Such a position is absolutely incompatible with successful trading and almost invariably leads to mistakes of judgment in addition to the mere physical and mental discomfort involved.

That is the best reason why trading losses should be definitely limited in advance of the actual transaction which begins the trade, either by actual or mental stops. If for any reason such precautions have not been taken, and the trader finds himself getting into a state of anxiety where his judgment is impaired and his normal activities interfered with, his best course is either to take his loss immediately or else place a stop on any further

¹ See Page 539.

loss. In either case, once he has relieved himself of the responsibility for further extension of his judgment his worry will be lessened, if not entirely dissipated.

The action may result in taking a heavy loss, but the loss is as nothing compared with continuation of such a state of mental anxiety. If long continued it may easily unfit the trader for any further successful trading operations in the future. If caught in time, as it almost always can be, the loss should merely be charged up to experience, and the lesson to be learned is to limit one's risk in the future and thus avoid being again precipitated into any such psychological pocket.

Successful Trader Avoids Upsets

The individual who is fit for successful trading will very rarely find himself in such a position, either because he has originally limited his loss, because he generally makes correct calculations and forecasts, or because he can adjust his own analysis and reasoning to actual market action and is thus able to shift his mental and actual market position if he finds his original analysis has been wrong. And, finally, because in those rare instances where he *does* find himself getting in too deep and worrying too much about any particular commitment, he will not be slow in realizing that such worry may affect all of his more successful trading and that his best course is to take his loss, or at least limit it immediately, and relieve his mind of this particular problem on which his judgment has been incorrect.

We have said that the individual who is truly fit for successful trading very rarely finds himself in such an upset mental and psychological state. That is not to say that the trader does not worry about his commitments. The most independent traders, and most of the professionals, use stop limits sparingly and rely chiefly on being very close to the market and acting quickly to limit their losses. Their worries are many and the average successful trader worries much more than the average successful business man. The vocation of stock market trading is not a particularly serene or pleasant one. That is why the average in-

dividual should look at it, if at all, purely as a profitable hobby, and not as something to get unduly excited about or risk his entire time and capital upon.

Even the unprofessional, or casual, trader will have his worries, and despite careful protection he may perhaps have rare experiences of psychological worry over an unfortunate commitment. But the individual who is *constantly* worried about his trading, who is constantly "getting scared" at moderate and intermediate reverses, who is inclined to doubt his own ability and does not have the courage of his convictions, does not make the best trader. The most desirable elements of a successful stock market trader, either occasional or professional, are a keen analytical mind, foresight, courageous conviction coupled with enough conservatism to avoid over-trading, comparative freedom from concern, a wide outlook on all things, good physical health, good power of reasoning and, finally, the courage and ability to act quickly, courageously and forcefully, once his mind is actually made up.

Analyzing One's Psychological Fitness

The most serious effect of trading on any individual is the psychological one. It is not the loss of capital or the loss of pride that is dangerous, but the loss of interest in anything outside of the market, the loss of sleep, the loss of appetite and the loss of all the natural functionings of a normal personality. When the individual is thus affected by stock market trading, there is one of two things wrong. Either he is trading too deep or he is not psychologically fitted for trading at all.

The latter is probably the case. It may be largely influenced, of course, by the practice of "trading too deep," or risking too much capital on one's trading operations. If this is true, then the psychological defect will be temporary and can be corrected by reducing one's risk to the point where he gains psychological serenity. This is the only remedy and it may be said to be a common one, for there are few traders who cannot get rid of this chronic psychological anxiety by reducing their risk in the market

to such low levels that they may rest assured "it doesn't matter much" even if they are wrong.

On the other hand, the trader who is forced thus to reduce his risk to a harmless minimum will probably not be particularly successful at trading, for it stands to reason that if he were successful he would not be forced by worry to reduce his risk. This type of trader must get most of his income in a psychic way, merely from "the love of the game" and from the satisfaction of having even only a small interest in the market.

The other type of trader who cannot overcome his habitual anxiety over market commitments by reducing risk to a negligible minimum is happily in the small minority. He does exist, however, and it is needless to say that he is harming himself by continuing to trade. He should get out of the market so far as trading is concerned, and perhaps is unfitted psychologically and mentally even for long-pull investment. In such case, of course, his only logical course is to keep away from the stock market entirely.

For all practical purposes, however, we may assume the more normal type of trader is he who avoids any habitual anxiety over his market commitments, and he is decidedly in the majority. But no matter how successful he is generally, no matter how conscientiously he protects his profits and stops his losses, he will not be truly successful unless he allows room for the utilization of his own personal judgment in at least some cases, and this policy must result in those rare periods when he is discouraged, worried, and perhaps feels that he is truly "unfitted" for even casual stock market trading.

This purely psychological "state" of even the successful trader is always temporary. It may result from one, or two, or a series of unfortunate commitments. It may result from the transference or intrusion of other business or domestic worries. It may merely be the result of a temporary psychological let-down, lack of sleep or even only a disordered stomach. Whatever the cause, if it is known it should be corrected as soon as possible. Generally, it is somewhat subconscious, however, and will disappear with time.

Prescription for the Psychological Upset

While the state lasts, however, the only logical course is for the trader to even up his commitments, perhaps take his losses, and get out of the market entirely. Every professional trader gets these spells and the generally recognized solution is "the trader's vacation." Such intermittent vacations do not indicate any lack of long-term success, any unfitness for trading or any defect in trading principles and ability. They are merely healthful restoratives and are advisable whenever the trader feels a bit "fed up" with the market.

No general prescription can be given. The most active traders take two weeks to a month off two to four times a year. The normal casual trader will find that the activity of his account varies greatly. There may be several months of activity, followed by sudden loss of interest and inactivity. The best prescription is to let these temperamental lulls take their natural course. They are merely a healthy sign, and the individual should not interfere with his vacation by worrying as to whether he has "lost his taste for trading." In 95 per cent. of the cases he has not, though it may appear so temporarily. When he is feeling fit once more his own interest will inform him that his vacation has ended, that he is again confident, courageous, logical and efficient, and he will go back naturally, eagerly and happily to his previous interests.

The Trader's Vacation

The normal trader will "get out" of the market when he ought to, merely because of this loss of taste for it. Some traders must be pushed out, however, and must decide more or less logically for themselves when the time is ripe for a vacation. The signals are fairly apparent. The development of any such state of anxiety as we have discussed is one of the best signals to take a vacation. Likewise, a run of bad luck, whether it results in anxiety or not, is often a signal to get out temporarily. It is especially advisable when the signal is caught early in the hard luck

streak. Every trader has such streaks; they may be only luck, or they may result from some more fundamental, but subconscious, personal situation. In any case, just as somewhat in a game of "craps," the trader will do well to lie low for a while when his luck is bad and make up for the period of quiet by pursuing his luck more unrelentingly when it is good.

We have previously noted the situation in which the trader becomes "scared," or panic-stricken. That is a sure sign that a market vacation will not come amiss. A more important factor than knowing when to take a vacation is the courage to do it. The tendency is to "hang on" a little longer, hoping the tide will turn or waiting for a more favorable opportunity. Such delay is almost always more costly than if losses had been taken when the danger signals appeared and the vacation begun at the rational moment.

Dangers of Setting a Definite Profit Goal

Another fairly well-defined rule, from a psychological standpoint, is the inadvisability of trading for any particular amount of profit. A trader who is going along quite successfully and satisfactorily lays himself open to a direct reversal of result when he decides to "make \$1,000 by the first of next month," to "make enough to pay off that loan before the first of the year" or to garner "the price of a new car before summer."

Fundamentally, the reason for the danger probably lies in the conscious effort to increase profits—to force them even only a little bit faster than they would normally accumulate. This feeling leads to acceptance of greater risk and the attempt to stretch earnings just a bit too far. Thus the normal functioning of the trader is thrown off balance, and even though only by a trifle of additional risk it is often enough to destroy that fine balance of logic and turn successful trading into loss.

Though the fundamental reasons are apparent, they do not appear strong enough logically to account for the rule. However that may be, if the reader does not care to accept the rule on faith he will almost unquestionably discover its efficacy to his own loss.

Be the underlying causes what they may, it is nevertheless courting reversal of profitable trading to set any such definite goal for trading profits.

The rest of the psychological trading rules are fairly apparent ones. One is that the trader should not be over-confident. In order to be successful he must have the previously noted measure of courage and confidence in his own judgment. This rule may appear somewhat of a contradiction, therefore. But it is not courage and confidence which must be repressed, it is merely over-confidence — that insidious element which leads to stubbornness, to “fighting the market,” to over-trading and to the possibility of eventual and large loss.

Resist Temptation to Over-Trade

Its corollary is the avoidance of over-enthusiasm, for approximately the same reasons. In this case, also, the trader must learn for himself through experience just where the dividing line lies between justifiable enthusiasm and over-enthusiasm. In the case of this element, however, it is much better to have too little than too much. The logical and reasonable trader can be highly successful without a grain of enthusiasm. In fact, this type often makes the best trader. But over-enthusiasm has never resulted in anything but loss, and generally large loss at that.

Over-enthusiasm leads to the interference of the imagination with the purely rational processes of analysis, results in over-trading, in refusing to face the facts and market action, and almost always brings eventually its opposite extreme, despondency, pessimism, discouragement, with its attendant warping of good sense and its misdirected logic.

Beware of Over-Confidence After Long Success

Finally, the trader must beware of success. It stands to reason that nothing is more conducive to over-confidence and over-trading than the individual's success. The fact that the trader has a splendid record of perhaps a whole year behind him does

not mean that he is infallible. It is more likely, all illusions to the contrary, to mean that he has had a spectacular run of good luck and must beware of reversal in his luck and his profits for the next year.

And, aside from this consideration, the trader should realize that if he has been successful, without the element of good fortune, then his only logical course is to continue to pursue his trading operations just as closely to those of the past as possible. The departure from his previous methods and scale of trading are more likely to bring him loss than greater profit. Instead of becoming over-confident and increasing his risks he should be sensible enough and consistent enough to go on trading just as in the past.

In specific and individual cases it is only the part of good trading principle to pyramid, to average down, to follow up one's advantage when he is certain he is correct and to take advantage of a run of good fortune. But, as a general rule, such policies are not to be trusted too far, are only for use in occasional instances and can lead to loss as well as greater profit.

The most fundamental dangers of trading success are the psychological ones, for they are those which result in increasing the risk, in over-confidence, in taking greater chances and in the evil of over-trading. The successful trader will be the one who masters all of these psychological interferences, banishes them as much as possible into the background of his personality and keeps his trading methods and policies as nearly rational, automatic, analytical and logical as may be possible, without wholly losing the necessary personal touch.

CHAPTER XXIII

THE TECHNICAL SIDE OF THE MARKET

Fundamental vs. Technical Factors

We have previously pointed out the general considerations differentiating between the fundamental and the technical factors which influence stock market movements and prices.¹ A very broad definition would be that the fundamental factors affecting the market are those which have to do chiefly with the actual or underlying value of stocks. The technical factors affecting the market are those elements arising chiefly in the market itself which may influence the movement of stocks without regard to the fundamental considerations.

In previous chapters we have studied the effects of such fundamental considerations affecting true value, such as the company's industry, its profits, financial position, prospects and so on. We have previously also touched upon some technical factors, but in this chapter we shall pay more special attention to technical considerations arising in the market itself, such as pool operations, resistance levels, inside operations, floating supply of stock and the market position as a result of its own movements.

The stock market trader tries to catch the short-swings in the stock market — he is constantly “in and out” of stocks, jumping from one issue to another, always with the chief idea of profiting from the fluctuation in the stock which he anticipates almost immediately. It is the trader's business to decide what stock is going to have the next big market movement, just when that move will begin and how far it is going. This is the ideal of the stock market trader and the reasons why it is purely an ideal are not difficult to see. If any one individual knew just where, when and how far stocks were going to move he would be a millionaire in a few weeks. No matter how small a capital he started with,

¹ See Chapter XIX, p. 467.

he would soon have such a large capital that his own individual trading operations would influence the actual market movement in large degree, and the result of his own trading, if none other, would defeat his original judgment, the expected move coming long before he expected it simply because of his own operations. Thus it may be seen that the perfect, or ideal, trader cannot exist even in theory. In point of practice he never does exist.

Technical Considerations Most Important in Trading

It is comparatively simple, therefore, to say that by study of technical conditions, in combination with fundamental considerations, the trader decides what stock will have the most advantageous move, which way it will be, when it will come and how far it will go. But neither in theory nor in practice can the trader ever be absolutely positive that his study has given the correct conclusion.

One of the most important, and basic, things for the student of the technical side of the stock market to realize, therefore, is that no definite rules can be formulated which are infallible. The best of rules in the stock market always have their exceptions. The most we can hope to do is to consider some of the more common, some of the more successful, tendencies which help to give clues regarding such future short-swing movements.

Despite these conservative statements, designed chiefly to disillusion any possible readers who expect to become proficient traders overnight, there are certain definite factors which generally signal certain definite movements. Decidedly, there "really is something in analysis of technical factors." They do not guarantee 100 per cent. results but they at least afford a clue to stock market prophecy and, what is perhaps most important, they mark one great difference between the blind speculator or the gambler, and the intelligent speculator or the investor. We know that the market student can apply himself to other factors besides the technical ones, but the complete student will not specialize merely on fundamentals.

Actual Observation is Necessary Basis

After all is said and done, the most important thing about studying technical action and its rules is actual observation. There is little reward in sitting down and figuring out what the stock market *ought* to do from fundamental considerations in the next week. It is practically impossible to analyze from a rational viewpoint. But it is very possible to study the past action of individual stocks and find certain conditions which generally have, in the past, been followed by certain future actions. The most important element in successful trading, therefore, is the long continued study of past history in the market, both generally and in individual stocks. By far the best method of pursuing such study, in fact the only one available for the novice, is through the medium of charts. They constitute one of the most potent elements of technical study and we shall take them up more carefully in the next chapter. For the time being it will be useful to consider some of the more technical factors in stock market trading which are not necessarily connected with the reading of charts.

We have seen that the underlying complexion of technical considerations comes from the market itself. Such technical factors are the phenomena arising from the normal action of any open trading market for securities, or for any other commodity, for that matter. The technical side of the market is much more artificial than the fundamental side. But there are two main types of technical consideration. One may be called the natural technical factor; the other the artificial technical factor. The former arises from more or less natural laws of supply and demand; the latter arises largely from artificial sources of supply and demand. Both the natural and the artificial technical phases are highly important for the trader who is intent upon catching the short-swing movement of stock price fluctuations in practical trading.

We may first consider the more natural influences which affect the technical position of a stock or the general market. From a basic standpoint, whether we are considering fundamentals or

technicalities, our reasoning must be based upon supply and demand of stocks, for we have seen that this is the true motive which accounts for stock price fluctuations.

The Natural Technical Factors

The natural technical factors are fairly apparent. It stands to reason, for instance, that the more demand for any stock compared with its supply, the greater the rate of advance, and vice versa. It also stands to reason, that after there has been a large, long or sustained buying movement in any stock, there is more likely to be a greater amount than normal of stock which may soon again be offered for sale. This is often called stock "overhanging the market," though the term is more correctly used to designate the technical basis for a resistance level limiting the recovery of a stock.

In normal trading it seems fairly certain that the bulk of buying and selling is done by traders and not by investors. Thus such trading is of the short-term variety. The trader does not hold his position for any great length of time. The reason for alternate rises and falls of stocks is thus apparent. An advance in any stock indicates that traders have been buying it. It also implies that such traders will soon try to sell their stock and complete their transactions. On the other hand, if traders have depressed a stock by selling short it stands to reason that they will begin to buy the stock back at no distant date to complete their transactions by "covering." The length of time that the trader will hold his position cannot, of course, be bound by rule. It depends largely upon his anticipation of the future movement. But the ideal toward which he works is rapidity of turn-over.

It is only natural, therefore, to expect a rapid upward movement in any stock, or in the general market, to be followed by at least partial reaction, and to expect a rapid decline to be followed by at least partial recovery. The greater the extent of such movement, the greater might logically be the next major reversal. The more rapid the original movement, the more rapid the next major reversal.

Normal Extent of the Intermediate Reaction

There are no rules which can always be depended upon for forecasting the turn in any movement or the extent of the reversal. Generally, however, the turn is indicated by growing irregularity, checking of the previous, or major, movement, by heavy trading and perhaps by several "false starts" in the direction of the reversal. The extent of the reversal is usually considered to be normal when it goes about one-third to one-half of the distance of the previous major movement. If the reversal, or intermediate movement, goes further than half of the major movement, it is usually considered, other things being equal, to indicate the probability that a more lasting reversal is forming, and that perhaps the major movement in the original direction is over, to be followed by the reverse movement developing into the major movement.

To cite a specific example, let us look at a chart of Radio Corporation of America common stock during 1928, as portrayed in Plate 77. At the beginning of the year the stock advanced from around 85 at point A to 195 at point B. After such a long and rapid advance it was only natural to assume that the "technical position" of the stock was being weakened. The reactions at points B-C and D-E were fairly small compared with the previous advance and showed no basis for expecting a reversal from the now well-established major upward movement.

The reactions did strengthen, however, the opinion that the long advance had weakened the technical position sufficiently to make probable a larger reaction in the near future. That reaction came in June at point F with a decline from 225 to 150 at point G. By the close of August at point I it was fairly apparent that this reaction was over, at least for the time being. What was the "technical analysis"? The stock had advanced from 85 to 195, then to 225, a total gain of 140 points. The normal reaction, without spoiling the major upward trend, would be, say, half of the previous advance, or 70 points.

The stock could have reacted, therefore, between points F and G, from 225 to as low as 155 without indicating a reversal in the

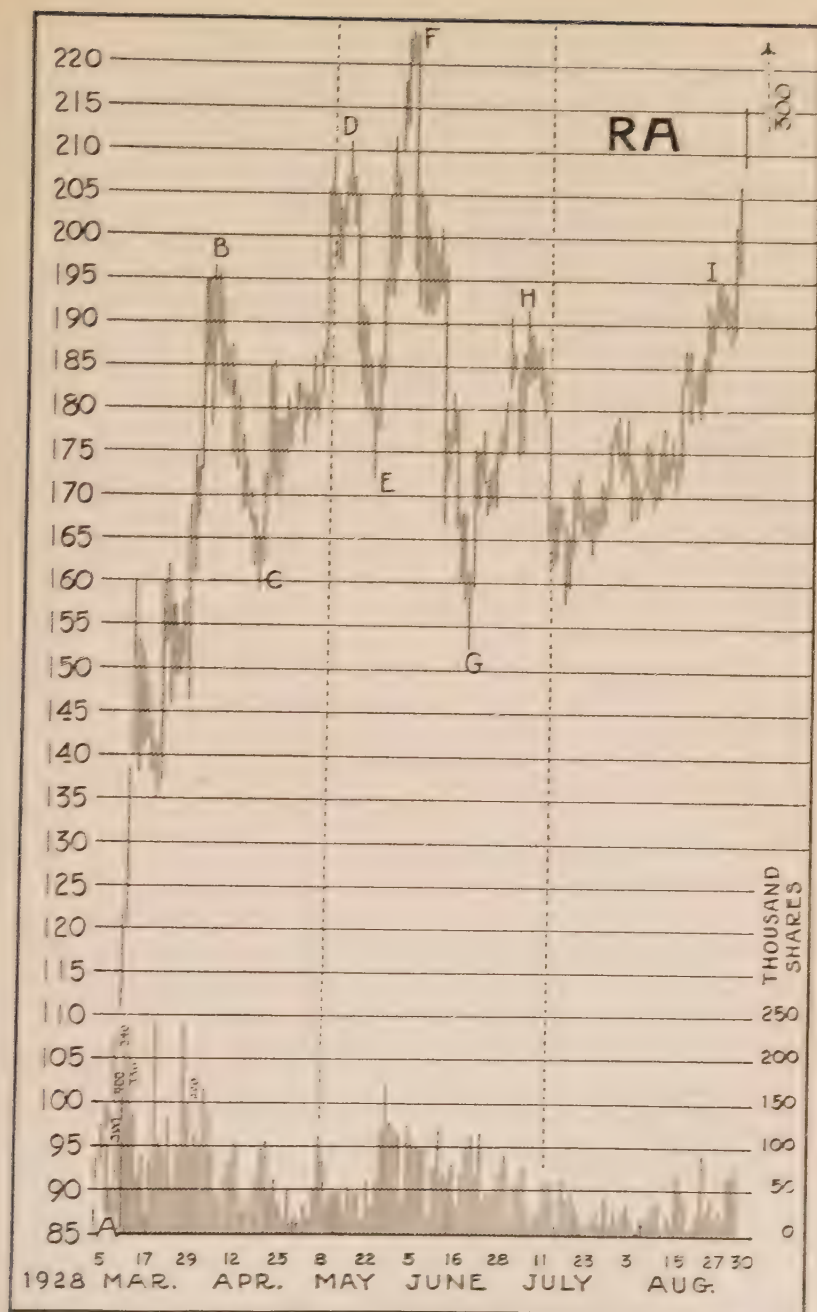


PLATE 77. DAILY CHART ON RADIO CORPORATION IN 1928.

Showing the full extent of a normal intermediate reaction, which culminated at point G.

upward trend. As a matter of fact, it reacted to just a little below that level, after which it gave indication that the reaction was over for the time being. The major upward trend was therefore intact; the trader could have assumed that the reaction in June, 1928, was merely a normal intermediate reaction and that the major movement was still upward. He would have been borne out in this analysis, for the stock thereafter continued its major advance to high levels of nearly 300 before the close of 1928.

Degrees of Strength in Extent of Reactions

The rule that an intermediate reversal should extend about one-third to one-half of the previous major movement is laid on the assumption that such a reversal is merely a normal one and does not indicate reversal of the major trend. If the intermediate reaction is less than one-third of the previous major movement, then, of course, the picture is stronger than normal for continuation of that major movement. If the reversal is more than one-half of the previous major move, then the picture is weak and suggests that the major trend may be reversed in the direction of the intermediate reaction.

On such a turn stop-loss orders or plain stop orders may be used to good advantage, but in general it is more advisable for the experienced trader to wait for a small and temporary intermediate move before switching his position. For instance, if the June reaction in Radio had been deeper than it was, and point G had indicated at, say, 140 that the major upward movement was likely to be reversed into a major downward movement, it would have been playing safe to have an order in to sell out holdings at 140 stop.

It would be more likely, however, considering the already material extent of the reaction, that there would develop a run-up, from the 140 level to perhaps around 155 or 160, as at point H. This movement would be an intermediate recovery in the new major downward movement, and such an intermediate movement, after the major trend had reversed itself, would be

the trader's opportunity to switch his position at the more favorable levels around 155, instead of being stopped out at 140. Such an intermediate movement does not always develop to a favorable extent, however, and that is why it is safer for the inexperienced trader to employ the stop order policy. Approximately the same principles, but in reverse form, apply in a major bear, instead of a bull, movement.

We have seen something of the nature of a "turning point" in the two short reactions at points B and D, following the long advance, which preceded the really important reaction, F to G, in June. The real turning point, however, is likely to take different forms and to cover a longer period of time. The indications, if the turning point had been a real one, suggesting that the reaction would be more than intermediate and would reverse the major movement would probably have been more distinct, shown even greater irregularity and covered a longer period of time. The chart also shows the high volume on such a turn, which is another important characteristic. We shall study such turning movements in greater detail in the next chapter and in connection with the general market.¹

The rule for such an intermediate reversal of a major trend and its extent is based upon more or less natural laws of momentum and pendulum swings. On the other hand, such movements are often limited by the more artificial technical factors which we have previously learned to call support levels, where there seems to be sufficient demand, perhaps from pools or banking support, to keep the price of the stock from declining below that range.

Natural Reasons for Resistance and Support Levels

Though both support levels on the down-side and resistance levels on the up-side are perhaps generally the result of such artificial technical factors, there are also good bases for the phenomena from the standpoint of natural technical factors. If a stock is in a general upward movement and goes from 50 to

¹ See Chapter XXIV, p. 604, and also Chapter XXV, p. 637.

100, holds about that level for some time, reacts to around 75 and then starts once more on its major upward movement, it will encounter "resistance," or "stock overhanging the market," when it gets back up to around 100 again. The reason is simple. The period of hesitation around 100 after the first run-up was in the nature of partial pool liquidation. The public bought more heavily of the stock at that level than at any other, not only because the stock was there longer but also because the pool was handing out the stock at those levels. The stock then declined to 75 and the previous purchasers at 100 began to be discouraged. Many of them have said to themselves, "Well, I don't think this stock is as good as I thought it was. If it gets back to around what I paid for it, I'm going to sell it."

The result is that when the stock gets back to around 100, where most of the purchases were made, there is a tendency for considerable of the stock to come back on the market and the major advance is thus resisted at that level. We have previously seen that this situation is also called stock "overhanging the market."¹

The same thing applies on the down-side, except in a more technical way, and therefore not so well defined. Pools selling short get a stock embarked on a major downward movement, say from 100 to 50, followed by a period of irregularity and intermediate recovery to 75. When the downward movement is resumed to levels of 50 once more, the stock meets "support" or resistance to further decline at that level. Traders who were tempted to sell the stock short during its irregular formation at 50 became discouraged on the intermediate recovery to 75, and when the stock gets back around 50, where the major portion sold short, they will be glad to cover at those levels which will let them out about even, and the stock therefore meets buying for their short covering operations, which tends to impede decline of the stock at that support point.

Furthermore, there will be traders and the public who saw the stock down to 50 once, thought it a bargain there but neglected to buy. They watched with chagrin the recovery to 75, wishing

¹ See Page 561.

they had bought at 50. On the second dip to 50 the stock will meet support or resistance to lower prices, through the confident purchases of these individuals who think the stock is low enough and should here reverse from its major downward trend into a major upward trend. We shall study more about these resistance levels in our next chapter, also. We shall see a good example of a support level in our study of the general market action at the close of this chapter¹ and have previously noted an approximate support formation in Plate 76 on page 543.

Importance of Closing Prices

Another minor consideration in the natural technical classification is that of closing prices. We have previously seen² that closing prices for the general market are important as indicating the probable trend for the next day. The same thing applies to individual stocks. The point is perhaps somewhat a psychological one, and yet its consideration comes under the head of natural technical factors.

The public pays more attention to closing prices than the highs and lows for the day, since closing prices are the latest values they have to study, and since closing prices determine the net rise or fall in points for the day's trading, and the public is naturally interested in the actual net change for each trading session. If a stock's close is favorable, therefore, it is more likely to come to the attention of the public and induce a good demand for the morrow, while if the close is poor the reverse is true.

In other words, if a stock makes a good advance during the day but slides right back to its opening levels before the close of the market the picture is not so good from a technical standpoint as if the price advanced not so far but actually held the whole advance at the close. We shall see in the next chapter that the charting of closing prices is also important, largely for similar reasons, and also because the closing prices, in relation to the high and low for the day, together with consideration of sales

¹ See Page 587.

² See Chapter XXI, p. 526.

volume for the day, quite often gives a good clue as to the manipulation of insiders.¹

Without reference to chart technique, however, and other things being equal, continuation of any movement is probable if the movement is not too fast, if most of the day's gain is held at the close and if volume of sales for the day is not too large. Continuation of the movement is not so probable if the movement is sudden or convulsive, if the day's gain is not well held to the close and if volume of the day's sales is comparatively large.

In our study of chart reading we shall see that one of the best indications of the end of any movement is its reversal during the day on a comparatively large volume of trading.² Such a picture is important because it indicates, if the previous movement has been up, that demand has been overtaken by supply, and, if the previous movement has been downward, that the supply has finally been overtaken by demand for the stock.

The Artificial Technical Factors

Having considered some of the chief natural technical factors, we may proceed to the more important consideration of artificial technical factors. These factors are called artificial because, while they still result from supply and demand for stock, such supply and demand is based more upon artificial considerations, such as pool manipulation, banking operations and other "inside" stimuli.

It has previously been indicated³ that the two great, and often conflicting, forces operating in the stock market may be divided into the public and the insiders. The insiders include the pools, the professional traders, the banks and all other influences of supply and demand in the market which operate on a systematic basis, with well-laid plans, campaigns and objectives, as opposed to the public, which is made up largely of unsystematic and more or less casual buying and selling by individuals. Since when the

¹ See Chapter XXV, p. 645.

² See Chapter XXV, p. 646.

³ See Chapter XXI, p. 521.

two sides are at odds, one must win and the other lose, and since the one element is so much better prepared to win than the other, it stands to reason that the professional element more often obtains its objectives. It is important, therefore, for the successful trader to know what the insiders are about, and thus to make himself one of that successful group.

Such a theory accounts practically for such surprises to the public as the abrupt reversal toward higher levels following the advance in the rediscount rate which we have reviewed.¹ It also accounts for the general tendency that the unexpected (so far as the public is concerned) often happens in the stock market.

Pool Operations

And its presumption leads us naturally to the subject of pool manipulation. There is no longer much doubt in the minds of authorities that pools do exist. Now and then someone, who perhaps still believes in Santa Claus, rises up to dispute the action of pools. But there is little need for such claim from a moral standpoint. The stock exchange can be perfectly fair, perfectly clean and above-board, and yet be the medium of pool operations.

A pool is the term commonly used to refer to a concentration of capital, often from many individuals and many sources, organized more or less loosely and upon a high degree of mutual faith and confidence, for the purpose of engineering a campaign in one individual stock through the increased control of credit and financial resources made possible by such concentration. The underlying principle of the pool is that the greater the amount of credit at hand under a single guidance, the greater is the proportion of any individual stock under such single guidance, and the easier, therefore, the engineering process of scientifically changing the market valuation of the stock.

We have previously seen² that the smaller the outstanding number of shares of stock in any corporation the easier does the stock move and the greater the price fluctuation caused by an

¹ See Chapter XXI, p. 519.

² See Chapter XVI, p. 381.

equivalent amount of buying or selling in that issue. In just the same way, the greater amount of outstanding stock which one individual or one single group can control, the smaller will be the remaining stock outstanding and potentially a factor in the market, and the easier it will be for additional buying or selling to influence the market price of the stock.

A pool generally originates with a group of individuals who already hold a comparatively large amount of the particular stock, either depositing that stock with their pool manager or agreeing to keep such stock away from the market for a certain definite time, agreed upon as the life of the pool. Every pool has a single manager or, at most, a small committee of managers. The single manager has the advantage of giving centralization and simplicity of operation. Besides the stock deposited or pledged at the beginning of the pool formation the members usually contribute additional capital, or stock which may be used as collateral, to finance additional operations of the pool.

Managing the Pool

The pool manager gradually obtains control of the market in the individual stock, after which he can do about anything with it he pleases. This statement must be modified, for the pool must almost always be working for a logical move. The aim of a pool is to get control of the market for a stock, change its market level and then complete its campaign by either buying back from the public at lower prices or selling to the public at higher prices. Its campaign is therefore not finished until the public enters the market one way or another and relieves the pool of its contracts in the stock. And the public will not enter the market, theoretically, until it is satisfied that the price of the stock is a fair one, all things considered. The pool must, therefore, have a logical foundation for any movement which it undertakes in any individual issue or it cannot convince the public that the new price is a fair one and complete its campaign.

The pool is thus little more than an organization, on a scientific basis, of a group of "insiders." It is a group of men who

are farsighted enough to see the potentiality of any stock and the logic of its eventually selling at the price and in the direction which the pool decides upon. All that the pool generally does, therefore, is to discount the future in a scientific way and hasten the market change which, without organized action, might take 10 times as long to accomplish.

Economic Service of the Pool

Economically, the pool serves a worthy purpose of assisting the open market in evaluating correctly the true worth of a stock. It also serves in many instances as the medium for "marketing" or popularizing a new or untried security, and thus serves the additional purpose of indirectly raising capital for business and commercial enterprise. The chief instance where a pool is unjustified in its activities is where there is misrepresentation or a manipulation of values to false levels. The misrepresentation by pools is very rare, for the laws and popular opinion are strict and quick to catch up on any such misrepresentation of the facts concerning any individual stock or situation.

The charge of placing false values upon stocks is more likely to be justified, but even in this light it is very seldom the pool's fault alone, if their stock is sent to levels either much higher or much lower than its true fundamental value. In fact, such a development, in which the stock's move goes too far, is more often merely proof that the pool was correct in its original feeling that the move was logical. And in most cases it is the public, discovering its agreement with the pool's analysis at a later date, which carries the stock further in the right direction than it should logically go, which is responsible for the false or extreme market valuation of the pool issue.

There have been plenty of examples, especially during the bull market of recent years, of pools which discovered a stock issue which was under-priced. Such a pool proceeded to carry on its campaign, buying the stock at prices below what it seemed worth. As the price of the stock reached levels apparently fair for the issue, the pool sold out and liquidated, only to find that the

public (or perhaps another pool) had just begun to get enthusiastic about the issue, and carried its price far, far higher than the original pool had ever dreamed of seeing it.

Since the pool is an organized group operating systematically in the stock market for certain definite ends, it is fairly easy to define the actions of such a group. There are bear pools and bull pools. According to the usual market terminology, the bull works for higher prices while the bear works for lower market levels.

Four Stages of Pool Operation

No matter in which direction the pool is working there are four well-defined stages in its operation, though the last one need not necessarily be always present and may be merely the beginning of a new cycle of pool activity. The four stages of pool activity are (1) Accumulation; (2) Marking Up; (3) Distribution; and (4) Marking Down. Accumulation is the process of quietly acquiring the stock to be put up, and the ideal method is to do so without attracting public attention to the stock or advancing its price, until the accumulation period is completed and the pool has accumulated all the stock it wants.

Marking up is the real "action period" on the up-side. The advance starts slowly, the pool manager perhaps leaving some of his accumulation for this period in order to have plenty of buying power in reserve. During the first part of this period there is not a great deal of news heard about the stock, for the pool would prefer to wait until higher levels are reached before it draws public attention to the stock's advantages. During the latter period of the marking up process more is heard about the stock. Explanations, real and fanciful, are issued for its advance. The traders, or insiders, who were not in on the move at its beginning come in.

The third stage of distribution is the most important to the pool and the most difficult to engineer. In this stage, which is the completion of the bull pool's campaign, the genius of the pool manager is put to the severest test. Having marked up

the price of the stock to the objective previously decided upon, the pool must now dispose of its stock before its transactions are completed and its profits transformed from paper to actual gain.

Pool Distribution

During this stage of distribution the most favorable reports are heard. All the good news, all the good prospects are circulated at this time. The public has perhaps neglected to notice the previous advance, but such advance is now called to its attention. The statements are favorable enough, the action of the stock good enough, to suggest that the stock is not through with its advance but is going right on up. We have seen that this may be the case, but it is not, so far as the original pool is concerned, and quite reasonably, for if the pool expected the market price of its stock to go much higher in the near future it would certainly continue to hold it and mark it up further, instead of engineering its distribution.

In any case, the aim of the distribution stage is to sell the stock which the pool has accumulated at much lower levels. The pool cannot sell this stock to itself and realize the profits. It must sell to "outsiders." And the outsiders are generally the public.

The fourth stage of the cycle is marking down. It is not necessarily present in the operations of a bull pool. The bull pool is through and has its profit for distribution to its members, after expenses, the pool manager's salary or commission and other charges are paid, when the distribution stage is over. Theoretically, however, this marking down stage finishes the cycle and puts the stock back where it started from. The bull pool marks down its stock after distribution if it thinks it has reached levels too high and can make further profits by switching its position and selling short. In this case, it transforms itself from a bull pool into a bear pool. Or the bull pool may go into the marking down stage after it has distributed its stock, for purposes of re-accumulation at lower levels, but in this case, during the period of marking down the pool has changed to a

bear policy, and when it begins this process it is beginning a new pool operation. The marking down stage, therefore, belongs really only to the operation of a bear pool, being the second step in such operation.

The Bear Pool

The first stage of a bear pool is distribution. The pool finds a stock which it thinks is selling too high. It distributes the stock to the public by much the same favorable propaganda as the bull pool used, only the distribution period was the close of the bull campaign whereas it is only the beginning of the bear campaign. For the bear pool must make its profits by selling short at high prices and covering, or buying back, at low prices.

The distribution of the bear pool is therefore done rather quietly, without drawing public attention to any inherent weakness in the stock, just as the bull pool accumulated quietly. When distribution has been completed, the bear pool proceeds to the marking down stage. More and more stock is sold and the market price is pushed systematically lower and lower. Just as the bull pool is generally engineered in a general bull market, so the bear pool is generally engineered in a bear market.

A few bear traders are sharp enough to come in on the first stages of the marking down period. Others follow as the movement progresses. But the pool manager tries to reassure the public, perhaps by good news, reports that the decline is unjustified, by frequent intermediate rallies, and by masking his campaign as much as possible, since his ideal is that the public shall hold on to its long stock until he gets the price marked down to his previously decided objective and is ready to finish his campaign by accumulation.

The accumulation stage finishes the bear pool's campaign, though it was only the beginning of the bull pool's manipulation. The accumulation of the bear pool, being the third stage, is the most important of the whole campaign, just as the third stage of the bull campaign, its distribution, was the most im-

portant for it. The expertness of the bear pool manager is thus shown up especially in the process of accumulation.

Accumulation at Close of a Bear Pool

Having sold its line of stock short at high prices, having succeeded in at least temporarily marking down the price of the stock, the bear pool must now accumulate the stock to cover its short position, complete its transactions and transfer its profits from paper to actual gain. This third stage is once more the "publicity stage." At this time the pool manager, or his publicity department, releases all the "dirt" that has been saved up.

At this stage all factors like poor earnings, the unfavorable prospects, the discouraging features come to the notice of the public. It is at this stage that the pool manager works his hardest to discourage the outsiders. The pool must buy stock in order to realize its profit. It cannot make a profit by buying such stock from itself. It must buy the stock from others. The campaign becomes one of discouragement. The pool manager makes the stock look and act as poorly as possible. The public now begins to realize that perhaps this decline in its stock was not so "unjustified" as it previously seemed, that prospects and earnings are poor, after all, that the stock acts and looks as if it were going still lower — and perhaps they had better sell their stock after all.

This is just what the bear pool manager wants. The more discouraged, or even panicky, the public becomes, the easier it will be for him to accumulate the stock and cover his pool's short commitments. The stock may look to the public as though it were going much lower still, and perhaps it may, but it stands to reason, in this case also, that the bear pool would not accumulate the stock and cover at these levels if it thought the chances favored the stock going much lower in the near future.

The fourth stage of the bear pool would be the marking up process. But this is more a theoretical stage, to complete the cycle of price movement, than a practical occurrence. The bear

pool has already realized its profit by selling a large volume of the stock at high prices, marking the price down and covering at lower prices. It is through with the campaign, under normal circumstances, and is not particularly interested in the future of the stock.

The fourth stage may occur, however, if the bear pool temporarily becomes a bull pool to mark the stock back up and begin a new campaign of distribution, or if it feels that the market has been too far depressed, that the stock is selling at bargain levels, and that it can make a further profit by switching its position and going long, in which case its complexion is also changed and it becomes, at least temporarily, a bull pool.

There is, of course, much more detail, much more finesse and much more method involved in a pool campaign than we have indicated by this rough outline of its operations. The pool manager must be constantly on the job. He must try to decide whether the stock he buys is coming from investors or traders, if it will be bought back again soon, late or never. He must watch every sale and try to decide whether the stock he is selling is being sold to investors or to traders, whether it is being bought outright or on margin, whether it is going into strong or weak hands, and whether it will come back on his market soon, late or never.

Importance of Proper Pool Management

The pool manager must have his hand on the pulse of the general market as well as that of his own stock. We have seen that a pool rarely succeeds in its campaign unless the campaign is a logical one, for its success lies in seeing possibilities before the public sees them. The pool manager's campaign may fail because he has wrongly analyzed the situation, has used poor foresight, has misjudged his market, has tried to buck that market, has tried to handle too much stock, has tried to garner too much profit for his pool account, or for many other reasons.

The pool manager may find that his attempt at manipulation has been ill-timed. The general market may turn weak just

when he has finished his accumulation and is ready to mark his stock up. He must then decide how long the general market will stay weak. He must decide on that basis whether to hold his entire line for future marking up, dump it all back on the market and run, liquidate only a part of his line, or try to "buck the general market" and pursue his marking up stage in spite of, and against, a weak general market. The bear pool manager may be confronted with a general run-up in the market just when he is ready to begin marking his stock down. He is then faced with the problems which we noted above, only on the reverse side of the market.

Pool Must Have Logical Ends in View

In any case, no pool manager and no pool campaign continues uninterrupted. The pool manager must know when to reverse his activities temporarily to reassure the public and keep them out of his market until he is ready for them. He is almost constantly on both sides of the market, buying today and selling tomorrow, buying a little more today than he sells, selling a little more tomorrow than he buys, but always working toward his final aim.

Thus by largely artificial means are pool manipulations brought about. Thus is accomplished one of the most important procedures for the trader's book of knowledge. Thus develops the most significant of the artificial technical movements of the market. Though its basis is artificial, the movement is brought about by purely logical, honest and legitimate buying and selling of stocks.

Of course, all pool manipulations are not exactly fair and above-board, since this statement, as most of those regarding stock market rules, has its exceptions. Questionable pool managers, it appears fairly probable, sometimes resort to the use of matched and wash sales to accomplish their purposes of changing the price of a stock in actual trading. A matched sale is one in which one broker or trader sells to another at a certain agreed price, the two participants working together and under previous agreement, for the purpose of unduly influencing the

market value of that particular stock, without regard for open market laws of supply and demand. The wash sale is that wherein the same individual, trader or broker, places simultaneous buying and selling orders at a certain price, generally with different brokers at the same time, to unduly affect the market price of that stock without regard for open market laws of supply and demand.

Matched Trades and Wash Sales

If a stock were selling in the open market, for instance, at 100 and the pool manager wished to advance the price, his usual and legitimate method would be to buy enough of the stock to advance the price. The illegitimate method would be either the matched or the wash sale. In the former he would arrange with a friend, or a pool associate, to enter his order at, say, 12:25 P.M. of that day to buy 1,600 shares of the stock at 102 $\frac{5}{8}$. The pool manager himself would then enter his own order to sell 1,600 shares of the stock, perhaps at the market, or perhaps at a slightly lower price than 102 $\frac{5}{8}$, and also at 12:25 P.M.

The chances are that the two matched orders would come to the floor of trading at just about the same time and that the pool manager's stock would be sold to his associate at the price indicated. Thus the price of 102 $\frac{5}{8}$ would be established as an actual sale price, even though the sale and purchase would cancel, since what the pool associate lost through buying the stock above the open market price the pool manager would gain by selling it at the higher price, and he would thus arrange to equalize the deal with his associate at the close of trading. The wash sale would be carried out in much the same way, except that the pool manager would give both orders himself, though through two different brokers.

Such illegitimate methods of trading are very seldom used, if we are to believe legitimate stock market authorities. It seems a logical statement, since the laws of all of the more reputable exchanges are very strict on this point and since the brokers would not be very long in discovering who was doing the matching or

washing of orders. And so keen is stock market brokerage rivalry and jealousy that there is generally someone in the crowd who dislikes the culprit sufficiently to make certain that his misconduct will be reported and disciplined. And since such "discipline" would mean not only disgrace and expulsion from the exchange, but loss of reputation and barring from high class circles forever, the ambitious trader or pool manager would think several times before he accepted the high degree of risk involved in such irregularities.

The very acceptance of pool manipulation as an important artificial technical factor presumes the success of most pool operations. Since these operations bring the most rapid and most profitable changes in market value for any stock, it is easy to see their importance to the trader. The trader is interested in short-term stock movements. He wants to know what stock will move quickest and furthest. That stock is almost certain to be one in which there is pool manipulation. The trader will try to find, therefore, a stock in which there is such systematic market manipulation.

Analyzing Pool Operations

But it does him little good to get into a stock being manipulated by a pool unless he knows what that pool is up to. If he buys a pool stock just before the bull pool has finished distribution and is about to let the issue slide, such purchase will not bring profit. It is of the utmost importance, therefore, that the successful trader in pool stocks know what the pool is doing or is about to do. If he knows that, he can "get aboard" at the right time, in the right direction, ride along with the pool, and make perhaps just as much profit comparatively as does the successful pool.

But it must have been apparent during our description of pool manipulation in its various stages that the greatest objective of the wily pool manager is not to let the public know what he is doing — to "fool the public," if we wish to take a cynical view of the matter. The pool manager prefers not to have the public

know that there is a pool in the stock. But if they know it, then he tries doubly hard to keep them from knowing what particular stage the pool is in and what it is going to do next.

This is the primary reason, beside encouraging the public on the opposite side from the pool, why pool manipulation is not so simple as our description of its general stages might lead the reader to believe. There are countless ins and outs; there are countless "false starts" and false moves. There are varied ruses, shake-outs and tricks to throw even the experienced trader off the track. None of the various stages are regular or conform to any normal formation. They all have exceptions, sudden reversals and quick turns, which catch all but the best traders at times and lead the inexperienced student far astray, often giving him the impression that he has been entirely wrong in his previous analysis and belief just before the results of his actually correct conclusions are to become apparent.

Once more, therefore, there are no set and definite rules for discovering pool manipulation or its various stages. But profits from such discovery are so large and so attractive that it behooves the successful trader to know some of the signs and to learn more or less accurate principles of detection from his own experience.

Detecting Pool Manipulation

The detection of pool manipulation is most easily accomplished and most readily explained through the use of charts, and the most important principles will be discussed in our study of charts in the following chapter. There are some general principles, however, which it will pay the novice to know as a background at least. Once more, the most important basis is long study of the action of the individual issue. Experience will show that certain stocks and types of stocks are "pool favorites" and that certain types of stocks lend themselves most easily to pool manipulation. As a basis, therefore, the trader may decide what stocks would be most likely to attract a pool, and he can thus narrow down his hunt for pool issues.

The bull pool generally likes a small issue — a stock whose capitalization is fairly low, perhaps usually below 1,000,000 shares of outstanding common stock. We have previously seen the basis for this characteristic.¹ This type of pool issue need not be particularly well known or popular with the public, but it must have various previously overlooked factors to recommend or damn it. For the pool will attend to acquainting the public with such factors when the stage of distribution is reached on the up-side, or the period of accumulation reached by the bear pool.

The other type of pool favorite is a stock which is already popular and well known. Generally, it is impossible to find many such stocks which have not already a fairly large capitalization and amount of stock outstanding. In such case the bull pool will select the stock, the greatest proportion of which appears to have been purchased by investors who have put the stock away for long-pull holding, and which stock will therefore not easily come back on the market. We have previously seen that the amount of stock which circulates more or less freely in brokerage house names, or is dealt in by active traders and is therefore "close to the market" or likely to be drawn into the market by any activity, is called the "floating supply" of that stock.²

The aim of the bull pool manager is to select a stock with a small floating supply, if he cannot get a popular stock without small capitalization. The more popular and well-known stock is a pool favorite, even if capitalization is large, provided the floating supply is small or can be easily diminished. The background of the bull pool's operations is to clean up this floating supply and reduce it as much as possible through the first stage of the pool operation, since the smaller the floating supply the easier will be the manipulation of the stock on the up-side.

If the pool is a bear organization and is selling stock short, generally in a bear market, then, of course, the situation is reversed, and the pool selects not necessarily a stock with small capitalization but rather one with comparatively large floating supply, and it adds to that floating supply by distribution in

¹ See Page 569.

² See Chapter XX, p. 497.

short selling, since its efforts are going to be bent toward bringing stock out and depressing its price.

Studying a Pool Stock's History

We have previously suggested the importance of studying the past history of any stock with regard to detecting pool operation. If a stock has had fairly large swings in the past and has then lapsed gradually into quietude for perhaps a year or two, the stage is set for pool manipulation. Whether the pool manipulation is to be up or down, the formation of the stock will be fairly narrow fluctuation around a steady price or normal. The stock will "make a line," in chart parlance, going neither very far up nor very far down. Its range will grow gradually narrower and smaller, however, each successive smaller range indicating that activity is "drying up," that the pool is getting close to the end of its first stage and is getting ready for either marking up or down.

Barring false moves, therefore, the direction of the ensuing pool movement, generally of major proportions, will be indicated by the direction of the first large movement away from this gradually narrowing trading range. We will be able better to study these signs when we come to the consideration of chart study, and we may therefore leave further discussion until our next chapter.

Banking Operations as a Technical Factor

The other important artificial technical factor is that generally associated with "banking operations." Many of the larger banks, in large inland centers as well as in the New York district, have the interests of certain individual stocks and groups of stocks at heart and watch over them continually. Almost always the connection is begun through pure banking operations of the corporation represented by the stock. Next, perhaps, comes new financing for the company. The bank may merely advise about the financing and help to arrange it; it may organize, through its own brokerage friends, the syndicate which will han-

dle the issue; or it may actually undertake personally to market the securities of the corporation. In the latter case, the bank generally has a subsidiary or affiliated "securities company" which takes charge of this more specialized and unusual aspect of modern commercial and private banking.

At any rate, many of the larger and stronger banks gradually acquire a group of stocks for which they accept a measure of responsibility and for which they get the reputation of sponsoring. If the bank has had very much to do with the stock's financing it is even quite probable that a good portion of its fee for such service has been paid in the stock itself, or in options¹ of some kind on the stock. The bank is therefore especially interested in maintaining a good market for the stock.

Banks as Sponsors of Individual Stocks

The banks which find themselves in such position are generally large enough and strong enough to practically control the market in their pet issues, if they care to do so. Their measure of control or their manipulation activities affecting the market for the stock are popularly termed "banking operations." In point of practice such operations are generally confused with those of large private banking houses, security originating houses, syndicates, large brokerage and commission firms and other types of "private" or "inside" interests. All of these types at one time or another may become factors in the market in influencing the price for individual stock issues by more or less artificial methods. It is never quite possible to detect where such operations are coming from and they are generally grouped under the head of "banking operations," which seems popularly to cover any such artificial technical factors not directly attributable to the manipulation of pools.

The effects of the banking operations, unlike those of pool manipulation, are almost invariably of a constructive nature. The pool may be either bullish or bearish. The source of such banking operations as we have outlined is almost always bullish.

¹ See Chapter XIV, p. 322.

The stocks which these interests sponsor are those which they feel responsible for, coming from corporations who are their chief customers. Their main interest, therefore, is to see the stocks of these corporations healthy and well taken care of in the open market.

Forms of Banking Sponsorship

In general, the technical effects of banking operations take various forms and are markedly visible only in case of an emergency. So long as its stocks are holding up well compared with the general market action, the protecting interests feel no call other than to keep an eye on them.

It sometimes happens that such interests will engineer, perhaps very indirectly, an advance in one of their pet issues, of which they may hold a considerable block of stock or options. But most generally they stand merely in the guise of protectors. When the storm comes, and then only, do the "banking interests" normally begin to function. It would be useless, and quite uncalled for, for these powers to try to stem any and every reaction in their stock. So long as such reactions hold within normal bounds they feel no call to action. But if their protected stock appears subject to unwarranted attack, acts much weaker than the general market and appears to be working into a position unfavorable to popular confidence, then the sponsoring interests are likely to come on the scene. They must and they do use a great deal of discretion in deciding when to use their tremendous financial influence in the market and how far to carry such influence. Often their effect is largely psychological, and the suggestion that bankers are supporting a stock or the slightest indication that they have begun buying is sufficient to discourage bear raiders and bring about a recovery in the stock.

The action of the inside or banking interest is more likely to take the form of establishing points of support, sometimes also called points of resistance. It is a price at which these interests stand ready to take all the stock that is offered, and thus resist any decline of their pet issue below such level.

Banking Support Levels

It is unnecessary to discuss the importance of detecting such artificial support levels for the trader. This is another instance where the tremendous financial backing, as well as the usual logic, of the "inside" interest will win out in almost any struggle with the public, and, in this case, even with professional traders. Establishing of support points by banking interests almost invariably results not only in stemming the decline in that individual issue but in bringing about a sharp and speedy recovery from such points of support.

For even the professional trader, who has probably been responsible for the bear raid, through short-selling, recognizes the danger, if not the poor logic, of bucking such strong sponsorship. By continuing to sell stock short to these interests he is getting nowhere in his campaign of reducing the price, because all his stock is taken without depressing the market below the banking support point. The bear trader is thus "selling himself into a bag" by reducing the floating supply and may easily find it difficult to cover if he continues to sell short. As soon as traders sense the formation of such an artificial support level, therefore, they immediately run to cover and the market price recovers rapidly.

Supporting the General Market

All that we have said about such banking operations in individual stock issues applies sometimes, and then just as powerfully, to the entire market. At times of near demoralization in a rapidly declining general market, banking support is likely to appear, either to support individual favorites or merely to support the general market, stem the decline and save the speculative community from a panic and popular psychology from demoralization. In such a case it often appears that the banks work in close co-operation, though such co-operation is also often due merely to their using similar lines of reasoning and beginning to support their favorite stocks at approximately the same time.

An Example of Banking Support

Perhaps the best example of "banking support" in recent years was offered in the drastic general decline of March 26, 1929. The reaction had gained momentum for several days until on this particular day it assumed the suggestion of panic conditions. Volume of trading was terrific, the highest on record to that date, the old-style tickers were over an hour behind the actual market, prices were dropping two and three points between sales and complete demoralization was near. The banks used two main steps to restore confidence. We have previously noted¹ how one of the largest of the New York City banks announced its offer of \$50,000,000 of additional credit for use in the call money market, whose stringency was one of the basic reasons for the break. At approximately the same time such banking support as we have described began to appear in the general market.

The author was sitting in a private board-room in Wall Street watching the slaughter. At about 12:30 P.M., the ticker still more than an hour behind, with its printed quotations still dropping spectacularly, the firm's commission partner on the floor of the New York Stock Exchange found time in his hectic trading to 'phone the home office the laconic message, "The market is getting support." Not more than a minute or so later the second message came, "The market is rallying." A few minutes later came the news ticker flash announcing the offer of additional call funds.

How much the historic reversal that followed this announcement was due to actual banking support and banking action, and how much was due merely to the psychological effect of the reports noted above, which were probably repeated throughout the nation within a few moments, needs no argument. Whether the basis was actual or psychological, and it was probably a combination of the two, the fact remains that prices reversed their trend sharply, closed the day far above the lows and proceeded on successive days to extend their recovery. Inside of three days they

¹ See Chapter XI, p. 243.

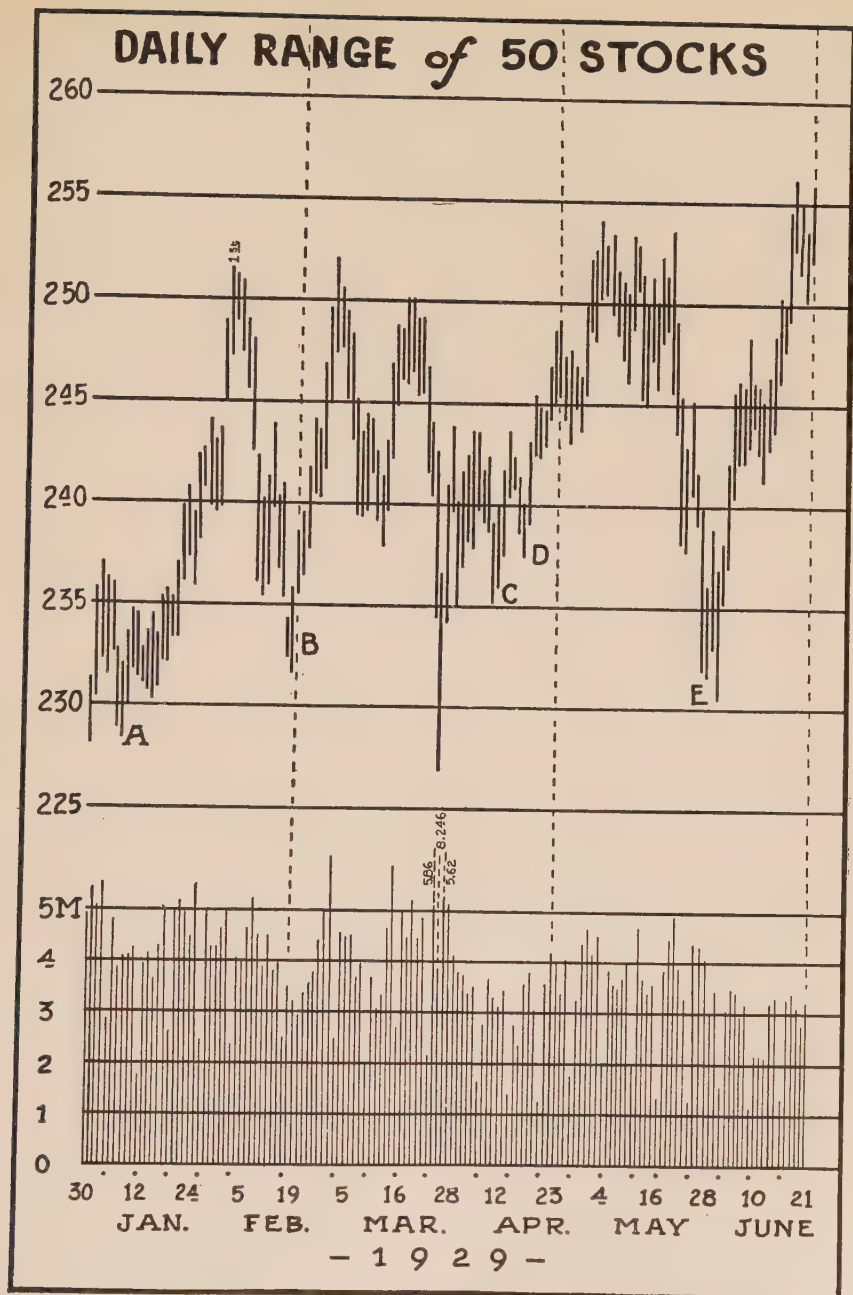


PLATE 78. CLOSE-UP OF THE MARKET. DAILY, JANUARY TO JUNE, 1929.
 Showing the repeated support level at around 232. Also what was *almost* a
 Complex Top formation (See page 683).

had made up 75 per cent. of the previous decline, which was of no mean proportions.

A Close-up Chart on Banking Support

The accompanying close-up chart of this movement, day by day, with volume of sales and the closing prices of the averages, shows how important this support level was for the market trader.¹ The chart is extended back to the beginning of the year to show how that support level might have been expected at just the point and at just the time it actually developed. The support level was around 230. It was indicated first in January at A, and again, at a slightly higher level of 232, at B, in February. The chart is also extended beyond the period of our study, to June, 1929, to show the formation of still another support level near the same figure, at 230, in June, 1929, at E, once more just about where it might have been expected.

Incidentally, this same chart also illustrates the further point, previously mentioned,² that the recovery from such a support level is generally expected to be followed shortly by the "secondary reaction." The hypothesis is a natural one, being based upon the assumption, generally correct, that the banking interests have had to absorb stock at their support levels, which they have no particular desire to keep. Their purchase of this stock was largely an emergency operation and therefore of temporary duration. Once their support has stemmed the downward tide and led to the usual recovery, the stock which they had to absorb at the support levels is more than likely to come back on the market when the immediate danger is over.

Combination of this resale stock of the supporting interests, together with stock of holders who have actually lost confidence and have merely been waiting for a moderate recovery to liquidate, and with possible renewal of the bear attacks, accounts logically for the appearance of the secondary reaction. We have previously suggested² that, especially in the recent years of bull

¹ See Page 587.

² See Chapter XXI, p. 530.

markets, there has been a tendency toward disappearance of this secondary reaction. At least it is no longer a dependable certainty and its depth and extent, when it does appear, have been shortened.

It still appears often enough to be an important technical factor, however. Views differ as to what constitutes the real old-fashioned secondary reaction, when it should appear and how far it should go. If it goes below the lowest levels of the primary reaction, the prospects for renewal of the advance are, of course, not so good as if the secondary reaction stops at a level above the lowest on the primary drop.

Chart Example of the Secondary Reaction

On the basis of our previous lesson on the extent of reactions, the recovery from support or resistance levels should be about half of the previous decline, and the secondary reaction, in order not to indicate weakness, should go only about one-half the distance of the recovery from the support levels. Thereafter, there generally follows a period of quiet, following the storms of the reaction. If the market quiets down following the reaction in a major bull movement, and following recovery from the support levels and the secondary reaction, it is a healthy sign, and, as we have seen before,¹ such a market should not be sold short, for the prospects are still good for renewal of the major upward trend after this period of quiet.

There are three reactions in the particular period and chart which we have been studying, any one of which, or all of which, might be considered secondary reactions after the break of late in March, 1929. The first and second, indicated by the letters C and D on the chart on page 587, came fairly soon and their time interval is more normal. The third did not come until the end of May, at point E. This reaction was much larger than the first two, and its depth is more like that generally expected of a secondary reaction, being not quite so deep as the primary reaction. On the other hand, it came much later than a secondary

¹ See Chapter XXI, p. 529.

reaction should appear, and for that reason it can hardly serve as a good example.

Secondary Recovery in Major Declines

All that we have said about secondary reactions following an intermediate reaction and recovery in a major bull movement applies equally to such formations in a declining market. The picture would be one of sharp recovery in the major decline. This recovery would not be checked, of course, by banking support, but rather by pool operations, delayed liquidation, profit-taking and other more natural technical factors. After this recovery in a major bear movement would develop the decline which might be followed by the "secondary recovery," just as had the secondary reaction in the major bull move. The secondary recovery in the bear market, however, appears even less often, it seems, than in the bull movement. If the secondary recovery went further than the primary recovery, then the prospects for continuation of the major decline would not be so good as if the secondary recovery had not gone quite so high as the primary recovery.

More will be said of such formations in our specific study of the Stock Market Panic of 1929, in a later chapter.¹

¹ See Chapter XXVI, p. 689.

CHAPTER XXIV

AN INTRODUCTION TO CHART READING

Charts as an Aid to Technical Analysis

In our previous study of stock market trading we have tried to emphasize the two distinct lines of departure in consideration of the relative attractions which various stocks may offer for market operation. These two lines of analysis, often in direct opposition to one another, are the fundamental and the technical sides. We have defined and reviewed both courses and we know that the fundamental considerations are those which have to do with the basic worth and value of any stock, while the technical considerations are those arising out of the stock market itself and which tend either to hasten market discounting of the fundamentals or, temporarily, to suspend such basic movement.

We have also seen that the fundamental considerations should be taken into account by the short-term trader, but that they are really more important for the long-swing investor. Since the technical tendencies act much more swiftly than the fundamentals, they are especially necessary for the trader who is studying to catch short-term movements.

And from the basic consideration that technical factors spring from action of the stock market itself, it stands to reason that the technical factors must be studied through such actual market action. In all of our previous consideration of the technical aspect, therefore, we have stressed the necessity for studying the action of the market itself in order to gain clues and knowledge regarding the action of these technical factors. We have tried to throw out suggestions for groundwork in such technical study but have also implied that understanding of the technical action of any stock or group of stocks can come only from long study of actual market action and market history.

Charts as an Aid to Memory

The most satisfactory method of studying past and current market action is through the medium of charts. Charts may take many different forms and may be adapted in such forms to many various codes of important market factors. But from a general standpoint a stock chart is merely the visible record of stock market action over a period of time.

If the human mind and memory were ideal in its tenacity, much of the need for chart study would be eliminated. But even if the mind could retain a clear picture of the exact action of any stock studied over a long period of past time, the use for charts would still be apparent in referring to those issues which are new to the individual and have not previously been under observation.

For Past Action

As a matter of fact, the memory cannot be depended upon for any very detailed or historical picture of stock market action. The only practical and dependable method of studying the past action of any stock is through the medium of the stock chart. And since technical position and the technical factors affecting the stock market depend upon such market action in the past, the study of such action by means of charts and the ability to read them are very important factors in successful stock market trading.

The advantages of familiarity with stock charts are plainly apparent. They consist in this ability to see, at a single glance, the past history of any stock or group of stocks, whether they have previously been under personal observation or not. The disadvantages are those arising from our old theorem that "nothing is certain in the stock market." Just as there are exceptions to the rules for trading and investment which we have thus far presented, so the rules and observations which we shall draw from our chart reading are by no means infallible. They all have their exceptions. The dangers of chart reading, therefore, lie chiefly in this direction.

Dangers of Chart Reading

The study of charts is indulged in by so few traders and its value is so great, that when any individual once begins to see the possibilities of chart reading and realizes how often certain rules operate successfully, he is very likely to overdo the "chart system" of trading, over-estimate the value of such charts and their rules, place implicit confidence in past conduct and ignore not only the exceptions to such rules but also the other considerations, perhaps largely fundamental, which must have their rightful place in successful stock market trading.

The author is an ardent believer in the efficacy of charts. He would go so far as to say that no individual can trade intelligently without them. But, on the other hand, the individual must be warned that they are not the magic key to stock market success. Charts are not to be used alone. Charts are not to be trusted implicitly. They can often be very misleading and can result in considerable loss. And these are the chief disadvantages, or dangers, of charts — that they lead the inexperienced and narrow trader into a sense of false security and result often in neglect of other and more fundamental factors.

Types of Stock Chart

We have previously suggested that there are many different ways of making up stock charts. All of them have some advantages but some of them have superior ones. The author considers the most satisfactory type the daily one, in which a fairly complete picture of each day's trading is shown, presenting as much important information as possible without making the resulting chart over-burdened with detail and therefore difficult to read. This chart consists in plotting the high and low price of each day, joined by a solid vertical bar, thus giving the day's "range" in price. It also includes a very slight horizontal line on this daily range to indicate the closing price, and, on a separate scale below, the volume of sales for that day.

There are daily charts, weekly charts, monthly charts and even

yearly charts. But it stands to reason that the smaller the time period charted individually the more flexible the chart will be, and therefore the more valuable in tracing minor past habits and actions. Some stock charts use merely a single point for each period plotted, taking generally the average between the high and low price reached. This style is not recommended, however. It is better than nothing, for it gives the general trend of the market's action, but it ignores many individual fluctuations, especially the extremes, which are especially helpful in defining support points, resistance levels and the like.

What to Include on the Stock Chart

Other charts add to our model description the opening prices as well as the closing prices. In this instance, the opening price is indicated by a very light horizontal mark extending to the left of the vertical range line, while the closing price is indicated at the right of the same line. The author does not judge the opening price as particularly important and avoids it to obtain simplicity. The closing price is much the more important of the two, and it may usually be assumed that the opening price, whether noted on the chart or not, is not far from the closing price noted on the previous day's range.

Some charts are lined for every day in the year, but this means that holidays leave a blank space which distorts the chart picture. The author uses regular "co-ordinate chart paper" in which he can indicate his own prices, his own dates, etc. — in short, paper on which only the vertical and horizontal lines are ruled and no figures appear. He leaves no line for holidays, which seems logical since there is no opportunity for market action on such days and no picture should appear.

The author does leave a vacant line, however, on days when the market is open but no sales of the individual stock are recorded. He indicates such a case by a small point, or period, directly below the volume base line. Some chart-makers prefer to include the "theoretical range" of the stock on such a day by using the closing bid and asked prices as the day's range. This

is helpful but also likely to be misleading, since the final bid and asked are the only quotations normally available and they may be far from the average bid and asked prices maintaining during most of the day's potential trading.

To account for the sudden drops in price range when a stock goes ex-dividend or ex some special distribution, it is only fair to indicate this. The author uses a series of vertical dots above the day's range to indicate a regular dividend, and a broken line to indicate special rights.

Deciding on the Proper Scale

The horizontal scale upon which charts are based is open to great question. It may be as large or as small as desired, but the extremes are to be avoided since they becloud the picture and make reading difficult either by too small or too large a picture. The question of using the arithmetic or the logarithmic scale as a basis is much more important to decide. The arithmetic scale plots price changes according to their absolute numerical value in dollars and fractions of dollars, without regard to previous levels. The logarithmic scale plots price changes in terms of percentages and in relation to the prices already attained.

It should be clear, for instance, that an advance of 10 points from a previous price of 200 is not nearly so important, from a relative standpoint, as is the same advance of 10 points from a previous level of 50. In the latter case the advance amounts to 20 per cent. In the former case it amounts to only five per cent. The arithmetic, or absolute, scale of values takes no account of this difference. It gives the same space to one advance as to the other. The logarithmic, or relative, scale, on the other hand, takes account of this difference and spaces movements according to their relative, or percentage, basis.

Arithmetic vs. Logarithmic Scales

One of the better-known stock information services has made a study of this difference between the two scales, and the differ-

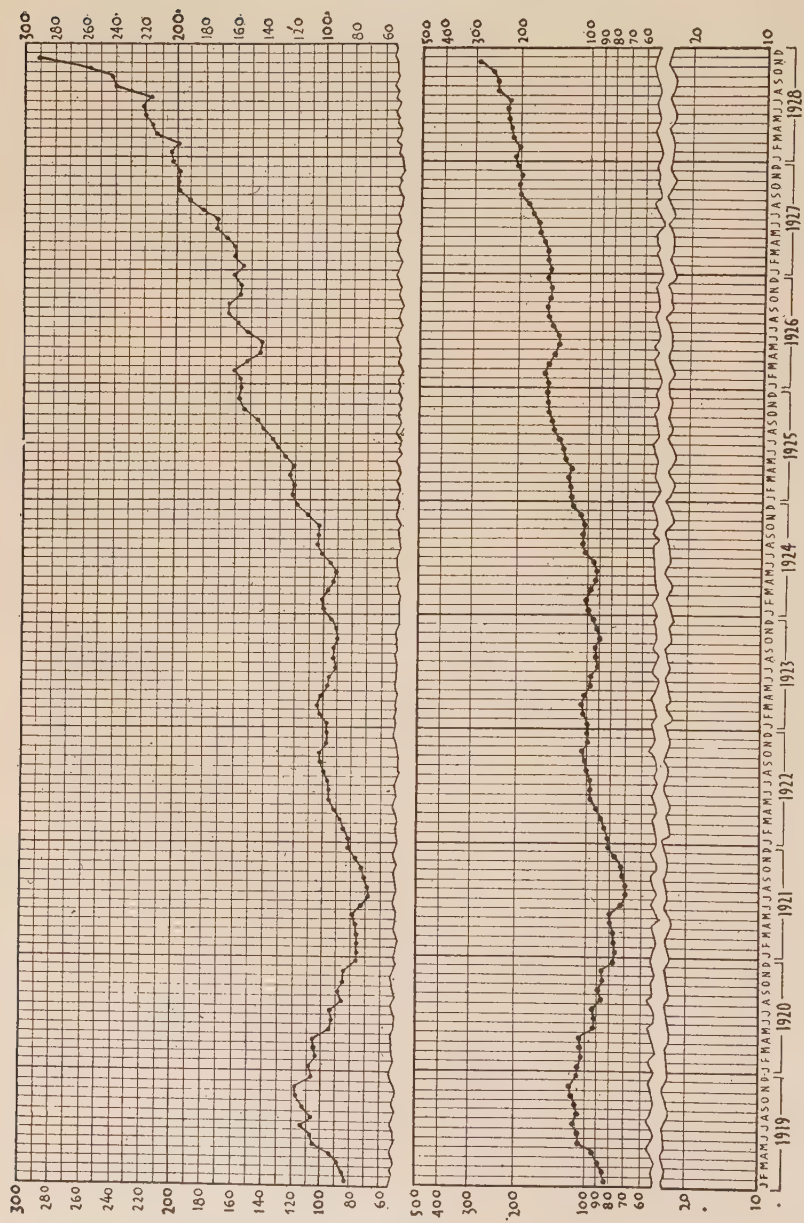


PLATE 79. THE ARITHMETIC VS. THE LOGARITHMIC SCALE

The upper line shows a representative market index series plotted on the regular, absolute, or arithmetic scale. The lower line shows the same series plotted on a percentage, or logarithmic, scale.

ence is clearly shown by the charts adduced and which are herewith reprinted.¹ The upper line (Plate 79) shows general stock market averages plotted monthly, from 1919 through 1928, on the arithmetic, or absolute, scale, while the lower line shows exactly the same averages and figures plotted on the logarithmic, or relative, scale. The comparative smoothness of the lower line is

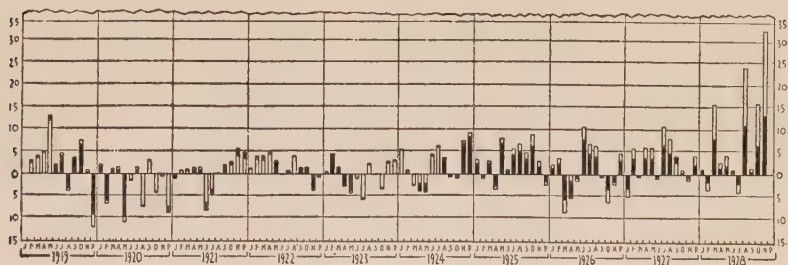


PLATE 80. ARITHMETIC VS. LOGARITHMIC MOVEMENT

A graphic illustration of the actual extent of movement of the successive points plotted on the two lines in Plate 79. The white bars show the actual monthly movement of the general market index as plotted on the arithmetic scale. The black bars show the actual monthly movement of the series when plotted on the logarithmic scale.

clear. In the second chart (Plate 80) are vertical bars showing the changes of the averages for each month recorded. The black bars indicate the actual amount of change when plotted on the logarithmic scale; the white bars the amount of change when plotted on the arithmetic scale. The relatively longer extension of the white bars indicates how much greater is the arithmetic change than the logarithmic change, especially in recent years when the general averages had already attained comparatively high levels.

Advantages of the Logarithmic Scale

The advantages of the logarithmic scale of chart plotting are the more logical basis in giving changes their relative, rather than their absolute, value, and the more practical result that high

¹ Rich, E. G., *Forbes Magazine*, February 15, 1929.

priced stocks do not tend so much to "run off the chart," as often happens when the absolute scale is used. The chief disadvantage of using the logarithmic scale is the tendency toward a certain "distortion" of the picture. Taking a long past history of a stock which has advanced from 25 to 250 in, say, 10 years, the more recent fluctuations are not going to look so similar, or definite, as those of 10 years ago, even though the stock, the operators, the insiders, the human psychology, the technical rules and even the pool manager are the same now as they were 10 years ago.

In the case of very high priced stocks, also, there is the danger that as such high levels are reached and the scale becomes constantly smaller, the chart will tend to obscure the fine, short-term movements necessary for adequate study and analysis of the chart. Another possible objection to use of the logarithmic scale, suggested above, is that many of the potential rules and regulations, including chiefly trends, support points, resistance points and other formulae are based upon the absolute or arithmetic scale and do not show up nearly as well on a logarithmic scale.

Perhaps one of the fundamental reasons for this situation is that the logarithmic scale is more technical and, while it seems more logical, is not the basis used by the majority of insiders, pool managers, etc., upon whose secret actions much of the chart formula is based. A pool manager, for instance, is much more likely to set his "objective" for a stock at so many points up, or down, on an arithmetic scale, rather than on a certain percentage change, based on a logarithmic scale.

There is no doubting, however, the advantages of the logarithmic scale and the rapid adoption of that scale by authoritative services, magazines and indexes. The author admits the advantages of both scales, and there does not seem any basic reason why either of them should not be used. The fact that the author uses the old arithmetic scale need not be taken to indicate his disapproval of the logarithmic basis. His use of the arithmetic scale is perhaps partly because it is hard "to teach an old dog new tricks," but it is also due largely to the fact that the author's charts go back many years on the arithmetic basis and

switching of the scale at this time would spoil that long and continuous picture.

Making One's Own Charts

If the reader has the time and the inclination he will probably find it somewhat more satisfactory, all things considered, to make up his own charts. It is a comparatively simple matter to keep individual charts up to date, once they have been begun. Daily records of high, low, closing prices and the volume of sales for all individual issues are listed in most of the large metropolitan daily newspapers. Charts may also be made up in similar fashion for the general market by using any of the recognized general averages.

In starting a new chart, however, it is usually advisable, if one wishes a good picture immediately, to go back for at least three months, but such research is a bit more difficult. Library files of daily newspapers may be used for the complete data, but if the chartist is satisfied only with the daily range he may find such past history published in a number of various periodicals. The *Commercial & Financial Chronicle* and the *Annalist* are perhaps the best periodicals which print such daily ranges over regular weekly periods.

There are various reasons why personal construction of one's stock charts is commendable, but the chief one is that it keeps the chartist in constant touch with market fluctuations. He is closer to the true picture, as it were, and can watch individual situations as they develop, while if he buys the charts already made he is less likely to give constant attention to each stock chart. After charts are begun and a series is under way the time consumed in "keeping up the charts" will gradually recede with experience and facility. After a little experience even the amateur will find that he can make up nearly 100 charts an hour. Contrary to popular judgment the drawing of charts requires no particular artistic ability. The author is a living example of this statement, and the neophyte may be encouraged to know that the charts here presented were copied from the author's originals by a professional draftsman.

Where to Buy Charts Ready-Made

If the trader does not care to give so much time or attention to his trading but still desires to make use of the unquestioned advantages of personal chart reading, there are a number of professional agencies which furnish such individual and general charts for a fee. Perhaps the best known of such sources is the Graphic Market Record of New York City. This service furnishes a new set of charts daily or weekly, with ranges and volume of sales complete for the previous period. The agency offers a set of over 50 such individual stock charts, but subscribers may select any group of stocks they wish if they do not care to subscribe for the entire service.

As we take up a study of chart reading it may once more be stressed that the rules and formulae deduced are not infallible, that charts are merely an aid to discovering the "technical" factors affecting any stock or the general market and that charts are not sufficient unto themselves, but should be used merely as an adjunct to considerations of fundamentals, conservatism and personal judgment.

In our preceding chapter on the technical factors surrounding the stock market we studied both the natural and the artificial technical factors. We saw that the trader is more interested in the artificial factors such as pool operation, because they are a little more dependable and because they act more quickly. Just as the technical position of any stock is more important when there is a pool or some other organized force operating in the stock, so charts become especially valuable in cases where such artificial manipulation is going on.

Proportion of Pool Stocks

We have previously intimated¹ that the number of such "pool stocks" is not so small as generally accepted. In a major bull market the estimate may be hazarded that as many as 75 per cent. of all active listed issues are under some type of artificial

¹ See Chapter XXIII, p. 569.

sponsorship, whether that sponsorship be dormant and largely protective at the moment or whether it be in the form of a manipulating pool.

If the sponsorship be dormant, then the trader need not be particularly interested in the stock. He is looking for stocks which have been under active pool manipulation and are just ready to undergo a worth-while market movement either one way or another. It is of prime importance, therefore, that the chart reader be able to detect from his charts the signs of pool manipulation. We have seen in the preceding chapter that such pool activity partakes of four separate and usually distinct stages, though only three are necessary.

Detecting Pool Manipulation by Charts

The bull pool accumulates, marks up and distributes. The bear pool distributes, marks down and accumulates. All that the successful chart trader needs to learn from his charts, therefore, is just what stage of manipulation the pool is in. If the stock has finished its accumulation stage he will buy it for a major advance. If it has just reached the end of its distribution stage, then he will sell it for a major decline. This sounds fairly simple, but the experienced stock trader will know that it is not quite so simple as it sounds.

There are certain fairly definite formations, however, visible only to the chart trader, which afford pretty clear indications of either accumulation or distribution. Having mastered these simple formations the chart reader will first be able to detect pool manipulation and, secondly, he will be in a much better position to decide whether the next major movement of the stock in question is to be up or down.

Seven Cardinal Chart Forecasting Formations

Roughly speaking, there are seven fairly definite formations which indicate accumulation and a like number which, if reversed

in their appearance, indicate distribution. For purposes of advance summary we list them as follows:

ACCUMULATION	DISTRIBUTION
1. Head and Shoulders Bottom	Head and Shoulders Top
2. Common Upward Turn	Common Downward Turn
3. Triangular Bottom	Triangular Top
4. Ascending Bottom	Descending Top
5. Double Bottom	Double Top
6. Complex Bottom	Complex Top
7. Broadening Bottom	Broadening Top

The Head and Shoulders Formation

One of the most common formations of accumulation, preceding a major advance, is the so-called "head and shoulders" bottom. It is the reverse of the more natural "head and shoulders" top and is physiologically consistent only for an individual who happens to be standing on his head. The chart on Westinghouse Electric & Manufacturing Company common stock, shown in Plate 81, from May to September, 1928, affords a good illustration of this typical formation, though no chart picked at random from actual market history will ever show a "perfect" formation. In June, 1928, however, Westinghouse made the left shoulder of its picture at 90, at point A. At point B, the head was made, though it is not quite as deep as it might be. At point C, in August the right shoulder was formed, though this also is not so deep as it should have been to correspond with the other shoulder at A.

The picture is one of accumulation and indicated a major upward movement when the marking up phase of the pool manipulation was reached. As a matter of fact, this particular formation is stronger for its size than most, since neither the head nor the right shoulder declined as far as they should have to make a perfect illustration. The stock advanced rapidly immediately after its short accumulation stage, and its sensational gains to levels around 300 are written in the history of the following year.

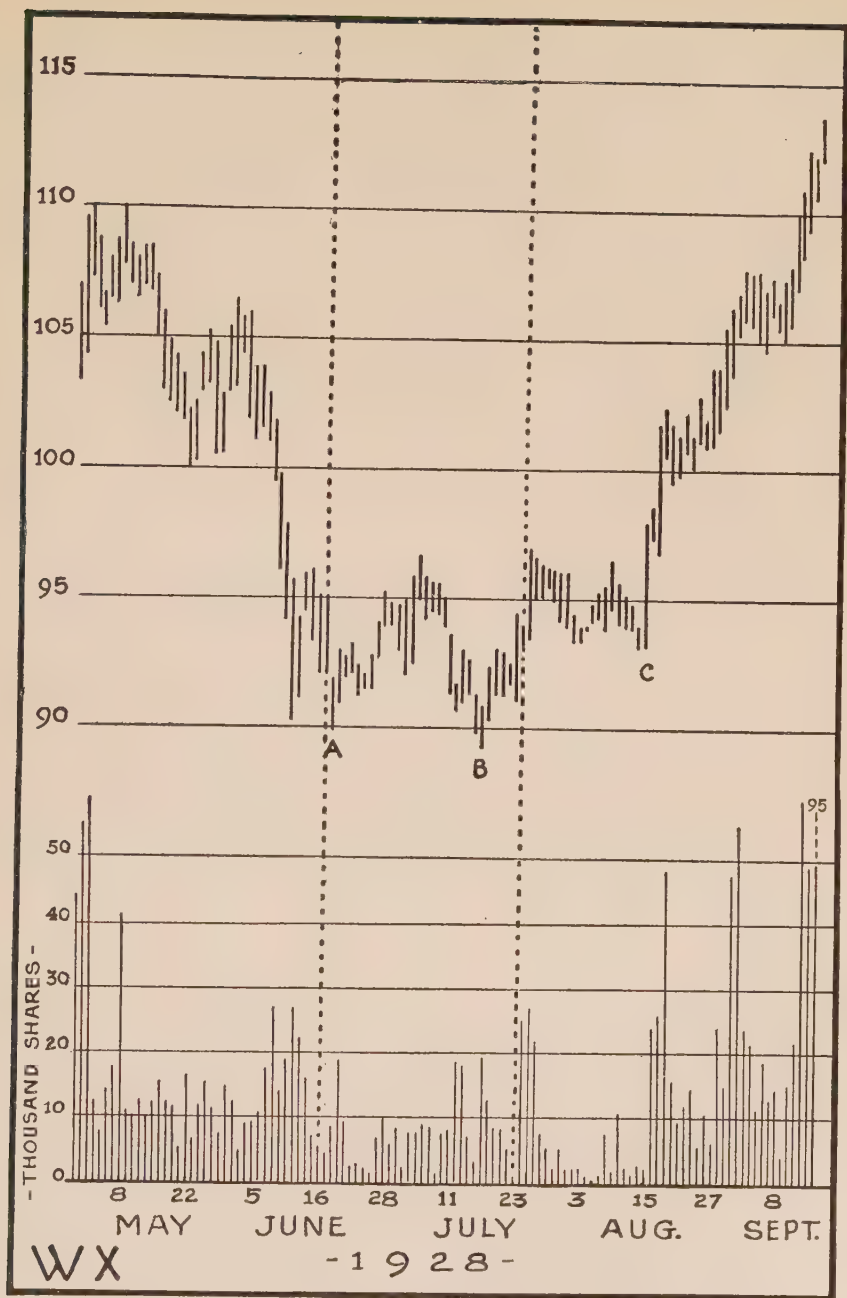


PLATE 81. DAILY CHART ON WESTINGHOUSE ELECTRIC IN 1928
Showing an irregular Head and Shoulders Bottom.

The "head and shoulders" top, or the distribution side of the formation is made in just the reverse manner. It is physiologically more consistent respecting its name and is illustrated in Plate 83, the chart on New York Central common stock. The left shoulder was formed in April, 1928, at about 189, or at point R. The head was formed at $191\frac{1}{2}$ at point F, and the right shoulder at G, around 187. The right shoulder was a little below the left one, indicating greater than normal weakness in the stock. The entire picture is one of distribution, indicating preparation for the marking down phase of the movement which followed soon after.

The Common Turn

The second picture of accumulation is the common upward turn, which is somewhat similar to the head and shoulders bottom, except that it is smoother and more regular. It consists merely in a gradual turning movement, forming a well-rounded bottom. The distribution stage is represented by the common downward turn, which is just the reverse, being a gradual, rounded, smooth turning down formation, similar to that shown in Plate 82, the chart on American Sugar common stock. The similarity to the head and shoulders top is clearly apparent and it is often difficult to distinguish between the two formations, but they are both fairly definite indications of major movement in the direction of the turn.

The Triangle, or Coil

The third common formation of accumulation and distribution is the triangular, or coil, picture. This formation is probably the most common and, incidentally, it is one of the most important formations in chart reading. The triangle, or coil, consists in a fairly constant, though generally irregular, narrowing down of the price range. It is one of the surest signals of pool operation. The pool accomplishes most of its accumulation or distribution in the broad swings which begin the triangle. Thereafter, the market fluctuations get narrower and narrower as the stock

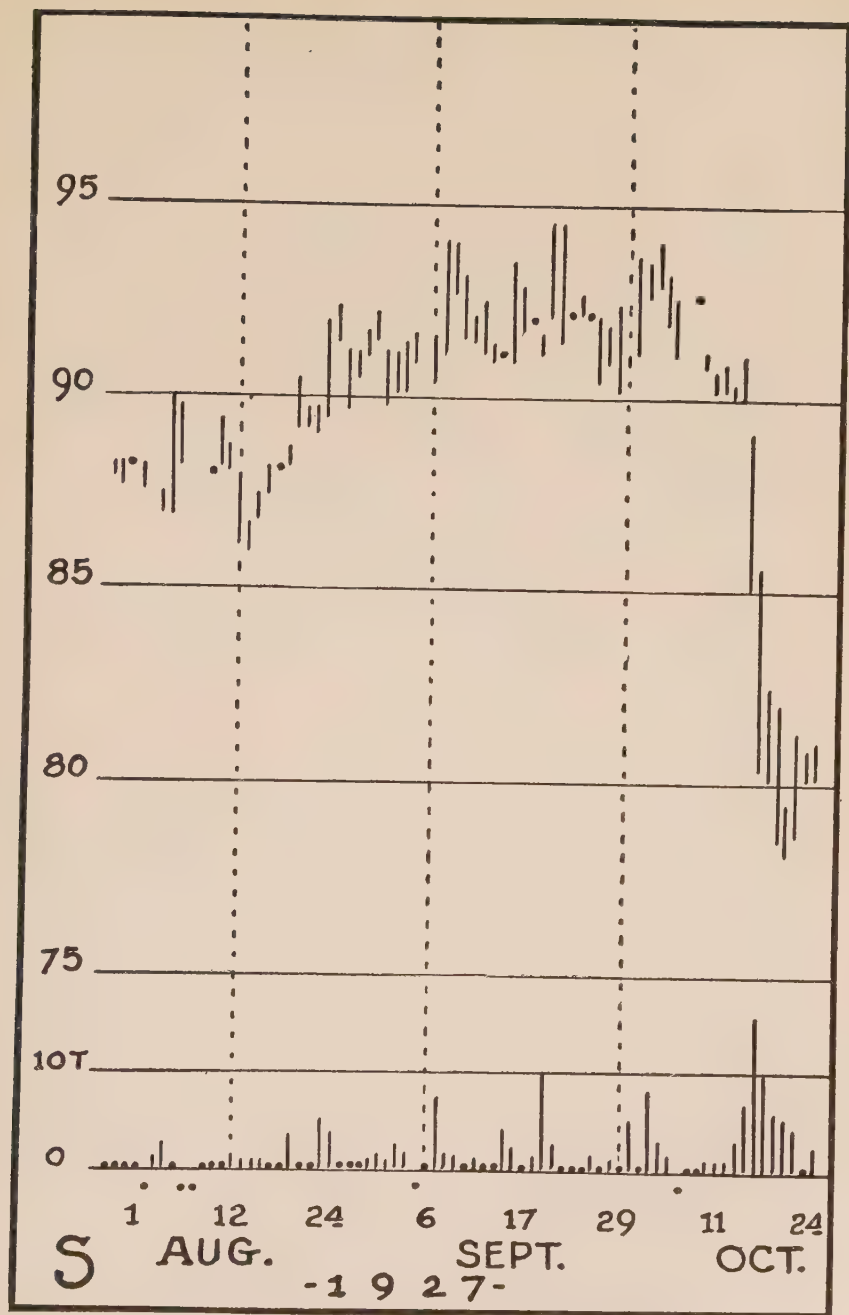


PLATE 82. DAILY CHART ON AMERICAN SUGAR IN 1927

Showing a typical Downward Turn formation. Note the irregularity while distribution was taking place and the Break-away Gap. (See page 650.)

swings up and down in the process of "cleaning up" the floating supply of stock and either selling or distributing as the pool desires. The narrowing range not only discourages the public in expectation of any sensational move but it also fits in with the pool's program, for it indicates that the pool is exhausting any active demand or supply for the stock and will therefore encounter little resistance when it does begin its true movement.

The coil or triangle grows constantly tighter, therefore, ready to spring. The triangle comes gradually to its apex, or pivot, from which point the big movement should begin. The triangle, while giving indication of pool operation in preparation for a big move, does not give any very definite indication, while it is forming, of which direction that move will take. Fundamentals must be considered for the answer to that question, though we shall later study other more technical factors which afford clues as to which direction the movement will take. In most cases the direction in which the stock first breaks from its narrowing range, or pivot, determines the direction of the major movement.

The Triangular Bottom

Typical of a bull pool action with triangular formation is a portion of the chart on New York Central common stock, which is presented in Plate 83, from August, 1927, to May, 1928. The pool accomplished most of its accumulation on the rapid advance from A to B. Thereafter, the "mopping up" movement continued, with narrowing price range indicating constant reduction of floating supply, to the apex of the triangle or coil, at C. There followed somewhat of a "false movement" and a support point, at D, both of which chart factors we shall discuss later.¹ At D, however, the accumulation period ended and the marking up stage began, with a comparatively rapid upward movement from 156 to a high point of 191½ at F, a gain of 35 points in about three months.

The decline in volume of sales during formation of the triangle from A to C is normal and gave further indication that

¹ See Pages 644 and 640, respectively.

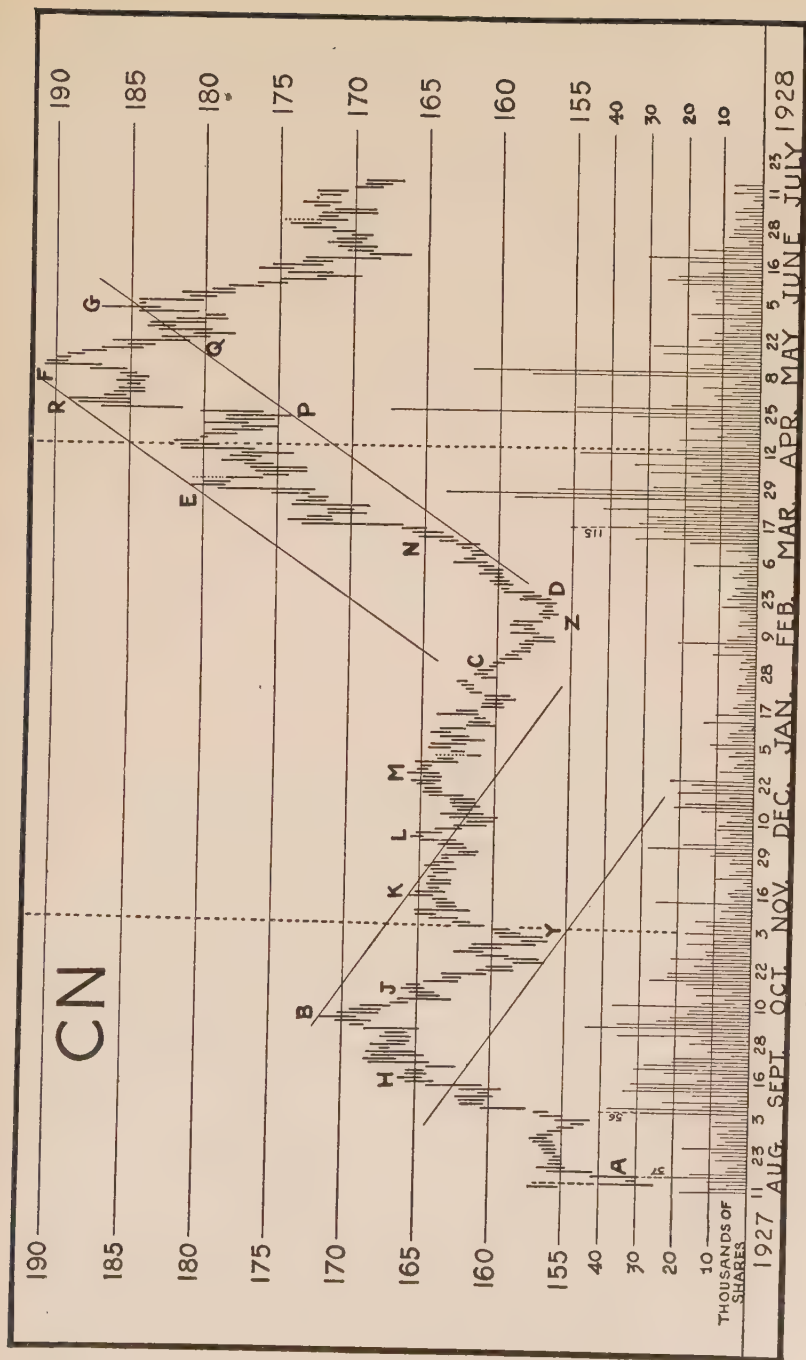


PLATE 83. DAILY CHART ON NEW YORK CENTRAL IN 1927-28

Showing an irregular Triangular Bottom, Trend Lines, Head and Shoulders Top, etc.

the pool was cleaning up the floating supply of stock in preparation for a move. It is notable that some accumulation was still going on in the early stages of the marking up period, indicated by the comparatively small volume of sales and rapid advance of the stock. As fluctuations became more violent, with heavy volume of trading, the bull pool operations passed from the stage of marking up into the final stage of distribution.

This final stage begins at around E and continues to around G. During this period the stock which the pool had accumulated at lower levels, from A to D, was being handed out to the public, and the pool was completing its campaign by selling out. Roughly, therefore, the three stages were accumulation, from A to D, marking up, from D to E, and distribution, from E to G. The top formation which indicated that the bull movement was at an end is the head and shoulders formation which we have already studied.¹

The Triangular Top

In Plate 84, showing the chart on Worthington Pump common stock, from January to November, 1925, we have typical indications of bear pool manipulation and the triangular top. The bear pool distributed its stock, through short selling, in the period from A to B, showing the typical triangle or coil formation. When as much stock had been distributed as the market would take without breaking, the marking down stage began and continued from B to around C. In this case the triangular formation shows no resistance point or false move, and the original decline, following the apex of the triangle, indicated the direction of the major movement to come.

The marking down stage began to be completed at around C and thereafter followed the final stage of the bear pool's operations, which consisted in accumulation, or buying to cover its previous short sales at the higher levels and thus complete its campaign and take its profits. In this particular instance, the

¹ See Page 604.

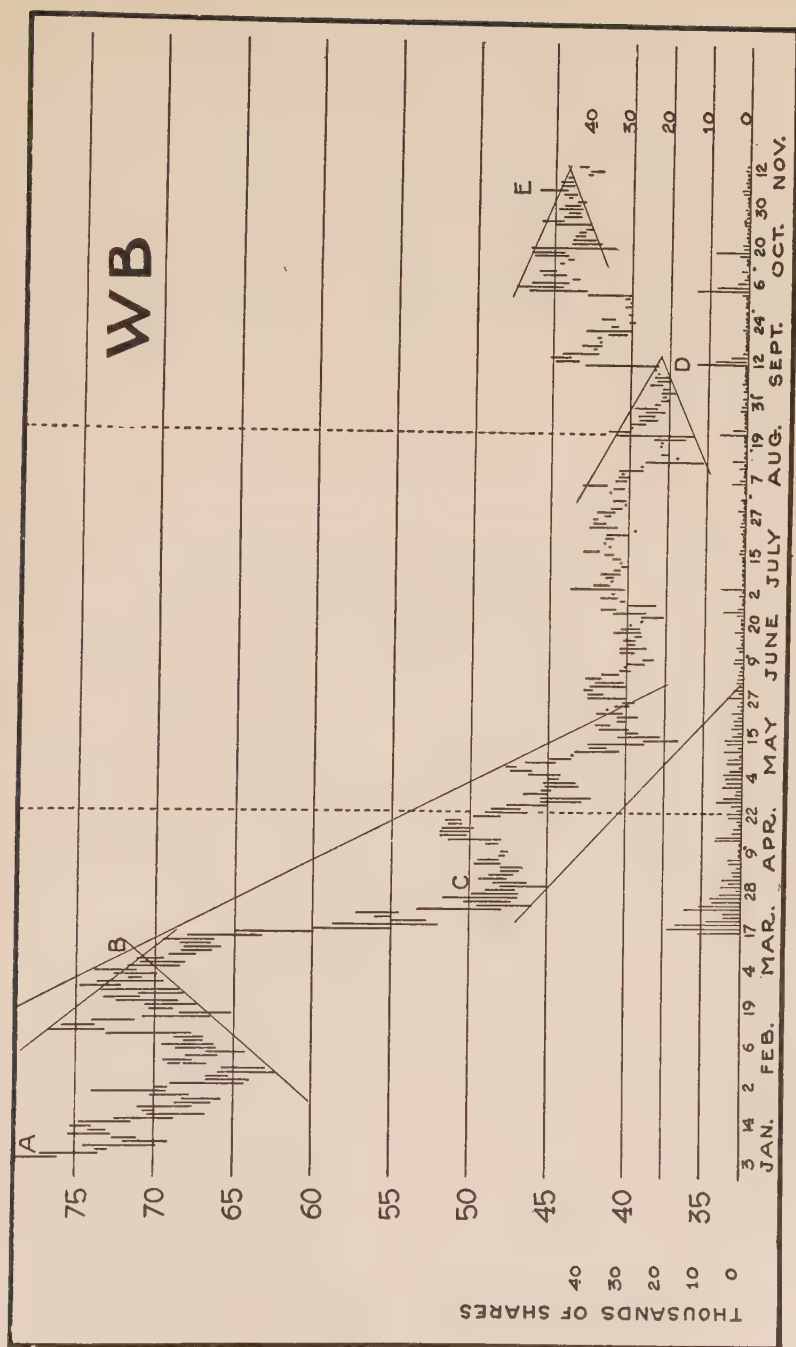


PLATE 84. DAILY CHART ON WORTHINGTON PUMP IN 1925

Showing a typical major bear movement, preceded by distribution on a Triangular Top.

stock recovered to around 47 in October but declined further by spring of the following year. It is quite possible that the same bear pool maintained a portion of its bear position for this second campaign, but the indications also are that a good portion of its short sales were covered in the intermediate accumulation stage from C to D. Preparation for the intermediate advance is indicated by recurrence of the accumulation triangle with its apex at D. The entire period from May to September gives another good illustration of the support level, which is seen to be from about 37 to 42.

The Ascending Bottom

The fourth basic chart formation indicating preparation for a major movement is the ascending bottom, indicating accumulation and advance, and the descending top, indicating distribution and a major decline. These formations are quite suggestive of the triangle or coil movement. They are not quite so common, but when they do develop they have the added advantage of indicating in their progress the direction of the major movement, before it actually develops. They are really little more than the triangle formation with only one of the sides, instead of two, sloping at an angle. The direction of the one sloping side indicates the direction of the major movement.

Two different periods in the recent history of General Motors common stock give us examples of both the ascending bottom and the descending top as basic formations prophesying major movements to come. Plate 85 shows the ascending bottom of General Motors early in 1928. A vertical line from A to C would give us one straight side, a horizontal line from A to B, the other straight side. The third side, forming the significant angle, is the irregularly rising line through points C, D, E, F, G and H. Each of these "bottoms" is slightly higher than the last, forming the ascending bottom and indicating accumulation for the rapid marking up stage, which carried the stock from 135 to 200 inside of a single month.

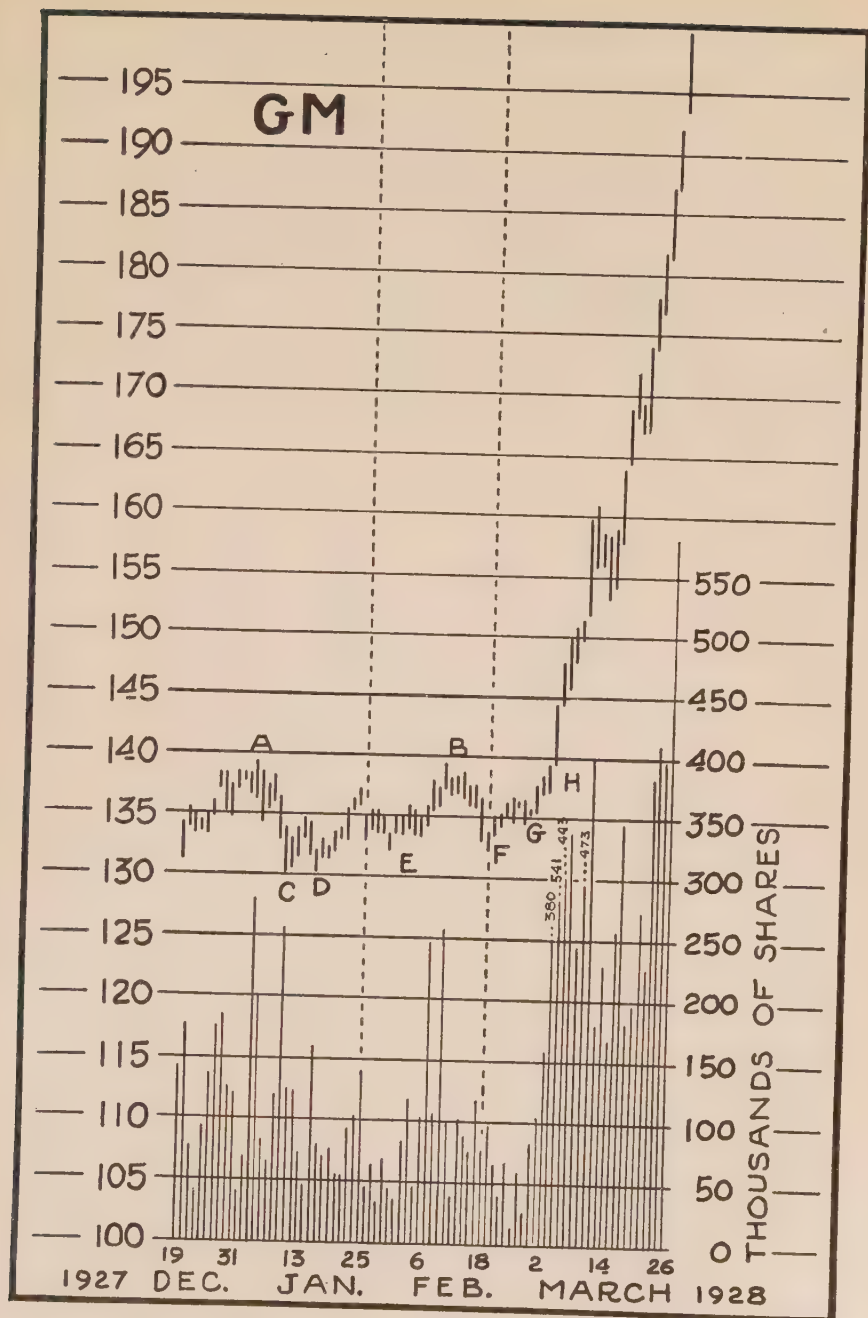


PLATE 85. DAILY CHART ON GENERAL MOTORS IN 1928

Showing an example of the Ascending Bottom as the signal for a major upward movement. The picture preceding point H also suggests the Triangular Bottom, another bullish indication.

The Descending Top

Again, in the spring of 1929, we have an example of the descending top in the same stock, shown in Plate 86. Here the vertical line, E-C, and the horizontal line, A, B, C (which went slightly too far) and D, form the two straight sides of the triangle. The irregularly descending line through E, F, G, H, I, J and K form the significant "descending tops," which indicated distribution in preparation for the ensuing decline which carried the stock down over 15 points in a little more than a month.

The Double Bottom

The fifth major formation is not quite so certain or definite as the others but is perhaps the best known to the public. It is called the double bottom in accumulation and the double top in distribution. Both formations are illustrated by Plate 87, showing a chart on General Asphalt common stock from March through June of 1926. After a long and rapid advance we have a comparatively short period of distribution, accompanied by, or indicated by, the double top at points A and B, and followed by the abrupt and rapid decline of about 20 points immediately following this signal. A somewhat similar double top is found repeated at points E and F. This formation was too short and too intermediate to be a strong one, however, and was followed by a smaller intermediate reaction which amounted to only about six points.

By a small stretch of the imagination points C and D suggest a double bottom and accumulation, even though the first movement carried too far and the second one fell a little short. Technically, they may be considered an ascending bottom, but in either case they indicate accumulation. The true double bottom is illustrated at points G and H. This formation indicated accumulation in preparation for the steady advance which followed.

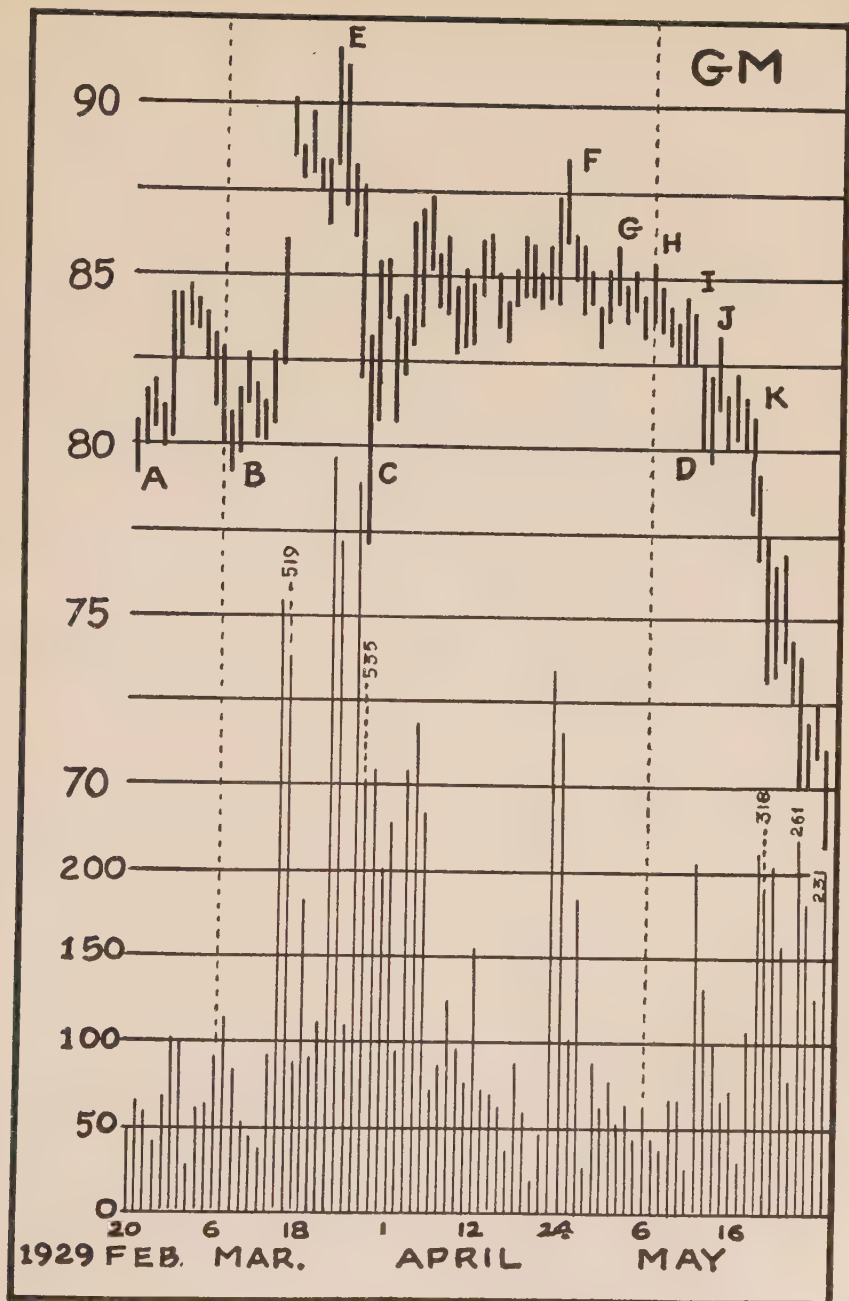


PLATE 86. DAILY CHART ON GENERAL MOTORS IN 1929

Showing an example of the Descending Top as the signal for a major decline. This picture is the opposite of Plate 85, so far as direction of movement is forecast. It also suggests a Triangular Top, adding to the bearish prognostication.

How the Chart Approves its Own Forecast

The reader should be struck throughout this study and presentation of illustrations with the duplication of signals in numerous cases. It is in such cases that the successful chart trader delights, for they merely strengthen the promise of a forthcoming major movement. In this particular case we have a very long triangular formation from A to C to D to E to G which comes gradually to its apex at point J. We shall see later in this chapter¹ illustrations of the ascending intermediate triangle, one of which occurs from G to J and also promised that the forthcoming movement would be upward. There is also a very strong upward "trend line" through K, C, D and J, which we shall also study in the next chapter.² The entire picture, therefore, presents a combination of at least four different chart formations, all of them bullish. When the stock sold at 95 by the close of August, the chart reader could not complain that his charts had misled him, and this chart had a perfect right to indulge in the bromidic phrase of "I told you so."

The Triple Top and Bottom

Another variation of the double bottom and double top are the triple, and sometimes quadruple, bottom and top. Some authorities hold that the more the tops the greater the ensuing decline and, conversely, the more the bottoms the sharper the future advance. The author holds no very strong brief for the matter, but it has been the experience of the past several years, during the recent bull market and perhaps due to it, that successive tops have merely been broken through on the up-side, instead of indicating reaction, almost as often as they have truly indicated distribution and that the stock would react from the successive tops. As has previously been suggested, popular opinion places more faith in the theory of double and triple tops and bottoms than does the author.

¹ See Page 632.

² See Chapter XXV, p. 647.

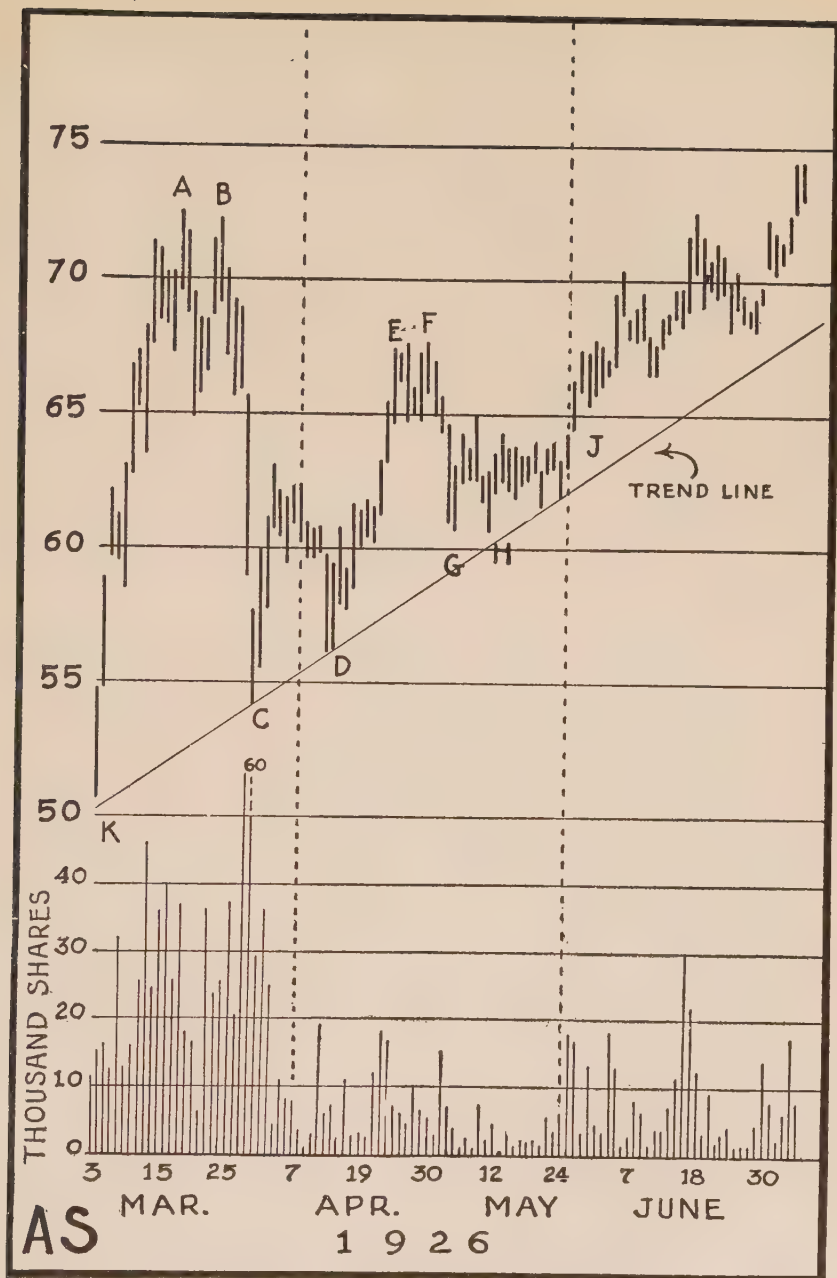


PLATE 87. DAILY CHART ON GENERAL ASPHALT IN 1926

Showing a Double Top at A-B, and several Double Bottoms from C to J. The bullish forecast was further strengthened by the long Triangle or Coil, ending at J, and by the upward Trend Line. (See page 647.)

The Complex Formation

The sixth basic formation prophesying a major movement is called the complex bottom for accumulation and the complex top for distribution. It is decidedly a simple combination of the head and shoulders and the double top or bottom formation. The picture is also often called the double head and shoulders movement. It differs from the head and shoulders formation only in that it substitutes a double top or a double bottom for the single head of the former picture.

This type of formation is not very common and examples are not particularly easy to find. When it is found, however, the movement is a strong indication. The complex bottom, of course, indicates accumulation and a strong upward movement. The complex top indicates distribution and a strong downward movement.

Typical illustration of the complex bottom is shown in Plate 88 and the chart on New York Central common stock from the beginning of 1926 through the summer months. The left shoulder was formed at point A, the first bottom at B and the second at C. The right shoulder appears at D. The second bottom picture is not perfect because it did not come down far enough to the level of B to form a double bottom. The tendency is unmistakable, however, and the fact that C did not go low enough to make a perfect picture merely indicated the underlying strength and increased the indications that active accumulation was under way in preparation for the major advance which soon materialized and carried the stock from its bottom levels of about 115 to around 150 by late summer.

A little better illustration of the complex top is afforded by Plate 89, showing the gyrations of Radio Corporation common stock in the early part of 1927. The left shoulder was formed at point A, the double top or double head at B and C, and the right shoulder at D. One of the imperfections of this picture is that point D came too far up to be level with the first shoulder at A. Here, therefore, we have the imperfection indicating strength rather than weakness. The formation resulted in its usual de-

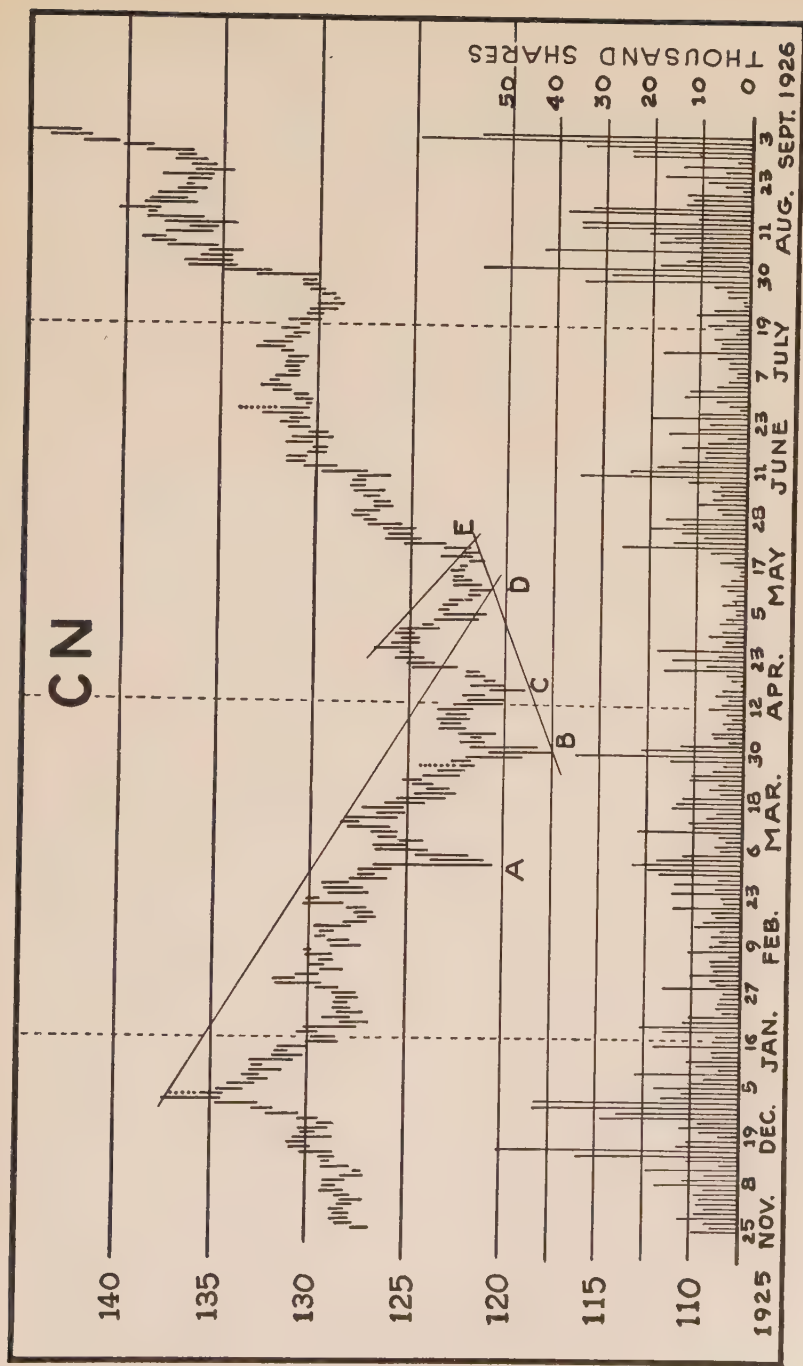


PLATE 88. DAILY CHART ON NEW YORK CENTRAL IN 1926

Showing the Complex Bottom, or Double Head and Shoulders Bottom. Points A and D form the Shoulders, and points B and C show the Double Bottom.

cline within the next few weeks, but the comparatively strong signal at D took much of the weakness from the picture. The stock declined about 15 points but the reaction was over by early summer.

The Broadening Formation

The seventh, and last, of our chief formations indicating preparation for a major movement is called the broadening bottom, in accumulation, and the broadening top, in distribution. It is little else than a triangle or coil, turned backwards, with the apex at the left and the broad face of the formation at the right. It is found quite rarely as a basic formation, but in those rare instances where it does appear it is almost a certain signal. The formation consists of five distinct reversals of direction in short order, each one going a little further than the last in that direction before reversing. One of our leading authorities on market action, Mr. A. W. Wetsel, is sponsor for the statement that in this formation there has only been one time in history when such a movement has reversed a sixth time.

A fairly satisfactory example of the broadening top is shown in Plate 90, in the chart on Chrysler common stock through the summer of 1927. After a substantial upward movement the stock reversed at point A. It reversed a second time at D, a third time at B, a fourth time at E and the fifth time at C. Each peak was slightly higher than the previous one and each low slightly lower than the previous low, thus forming the broadening picture which gives the movement its name. The three tops indicated that the major movement would be downward. If there had been only two tops and three bottoms, then the formation would be that of a broadening bottom and would signal a major advance instead of a decline.

In this case, under the formula, the stock reversed for the fifth time at point C. It could theoretically not reverse again without spoiling the formation. Since the fifth reversal was downward the major movement following was indicated as downward. There was a slight reversal at point G, but the formation re-

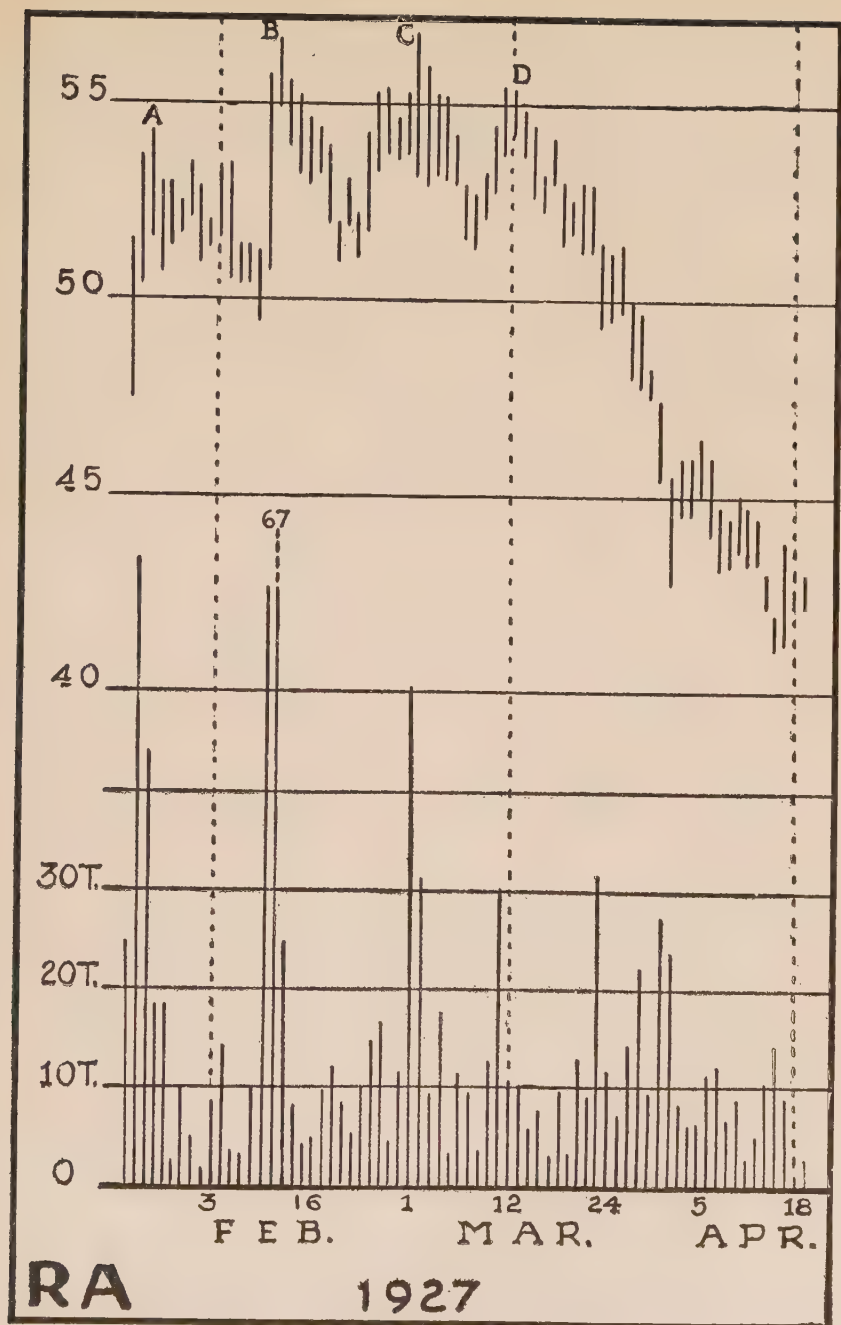


PLATE 89. DAILY CHART ON RADIO CORPORATION IN 1927
Showing the Complex Top, or the Double Head and Shoulders Top.

mained intact since the sixth reversal did not go higher than the previous high at point C. The resultant indication was for a major decline, therefore, which materialized directly following completion of the picture.

Summary of Seven Major Chart Formations

Once more, we may summarize our seven formations, linked largely with pool activities, and which indicate either accumula-

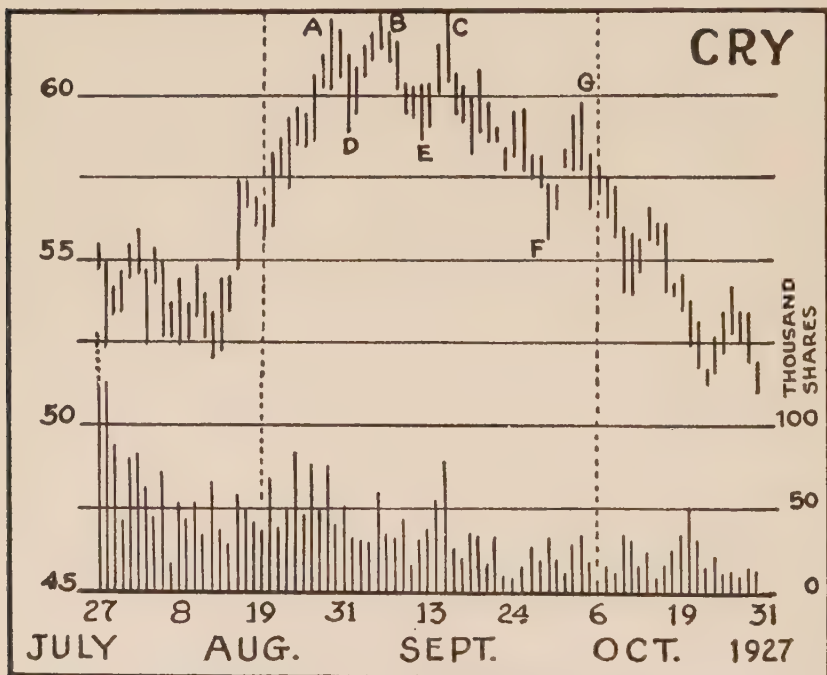


PLATE 90. DAILY CHART ON CHRYSLER MOTORS IN 1927

Showing an illustration of the comparatively rare broadening formation, in this case the Broadening Top, to indicate a major decline. Points A, B, and C are successively higher while D and E are successively lower. Theoretically this broadening formation always shows five distinct reversals of direction but never a sixth.

tion or distribution. The most common are the head and shoulders and triangle formations. Then come the common turn and the ascending bottom or the descending top. The fifth is the

double top or bottom and does not have as much weight, in the author's opinion, as it usually receives credit for. Next comes the complex formation, or the double head and shoulders, and, finally, the rare and therefore comparatively unimportant formation of the broadening top or bottom.

CHAPTER XXV

PRINCIPLES OF CHART TRADING

Importance of the Triangle Formation

In our study of the seven cardinal pool formations which indicate either accumulation or major distribution, we found that one of the most important pictures was the triangle or coil. We have noted the importance of such a formation when it is a major one, and we shall later see that it is also a very important formation even when it is small and intermediate. In most cases the formation of any type of triangle or coil is indicative of pool manipulation or other inside and artificial activity. In some cases such formations merely indicate a natural drying up of supply and demand for the stock, without the aid of artificial stimuli. In the latter case also, however, the triangular formation indicates preparation for a sharp move, since when buying or selling does finally come into the market the price will move rapidly, due merely to this previous exhaustion of the floating supply or near-by desire to buy and sell the stock.

Time Element in the Triangle Formation

Whether the triangle be formed naturally or through artificial pool manipulation, however, one fairly general rule applies. That is that the longer duration of time consumed in formation of the triangle, the larger will be the next big major movement. A good example of the patience which investors must have, contrasted with the fairly near returns accruing to the successful chart trader, is afforded in the chart on Miami Copper common stock, from September, 1927, through February, 1929, shown in Plates 91 and 92.

Here is an example of a stock which had been under accumulation for well over a year before the marking up stage actually

began. There are at least three long triangles, any one of which would lay the basis for a good advance. In this case the indications all pointed to the next major movement being upward. And it is typical of the uncanny foresight of technical position, as indicated by charts, that one might almost have prophesied, as early as the summer of 1927, merely from the action of this stock and without reference to commodity markets, the sensational advance in the price of copper metal which did not materialize until toward the close of 1928.

There were various factors in this picture useful to the chart trader. For one thing, the stock had been deflated low enough to suggest that the next major movement would be upward rather than downward. For another thing, the jump in volume and the fact that the stock "broke out" of its long triangle on the upside fortified such feeling that the major movement would be upward. On the chart alone, the stock was a buy between A and B at around 15. There followed a small advance to around 20, followed also by another period of accumulation which spelled disappointment for the purchaser in search of a quick material move.

Discovering Precedent

Another move came at C but this was also short-lived. We have previously shown the importance of studying the fundamental position which indicated the move would be upward. This illustration also shows the importance of studying past market history in connection with any stock and the formulation of rules based on past habit or action. By the time point C was reached, and the stock had broken out of its second long triangle, only to fall back once more as it had previously done at B, some sort of precedent became apparent. It began to appear that the stock was not yet ready for its major move and that another long and trying period of accumulation was in prospect. How long would it last? On a basis of past history it seemed plausible to assume that it would last about as long as had the previous triangles, A to B and B to C, and that this third formation would be similar to the first two.

Analyzing the Chart on Miami Copper

As a matter of fact, this assumption proved correct. Roughly, the picture from C to D simulated the previous ones from A to B and from B to C, in appearance to a large extent, but chiefly in point of time. Before D was reached, however, it appeared that the stock was acting stronger than it should have and there was some suggestion, therefore, that the real move was coming. The time interval from C to D was about equal to that from A to B and from B to C. After the usual short run-up to D, therefore, the stock should again have dropped back and begun another and its fourth long triangle if it was going to continue in its previous form.

The run-up to E, however, gave pretty clear indication that the stock had gotten out of its previous lassitude and was getting ready for its real move. This assumption had already been suggested by the extraordinary strength preceding point D. By the time F was reached there was little room for doubt on the question, especially in view of the small triangle of accumulation at that point, followed by a small, sharp shake-out or false movement.

The chart trader was perfectly justified in buying the stock on this shake-out at G, if indeed he had not done so long before. The action of the stock from a little before D up through F was so different from the preceding picture that it was practically certain that the long-awaited major upward movement was get-

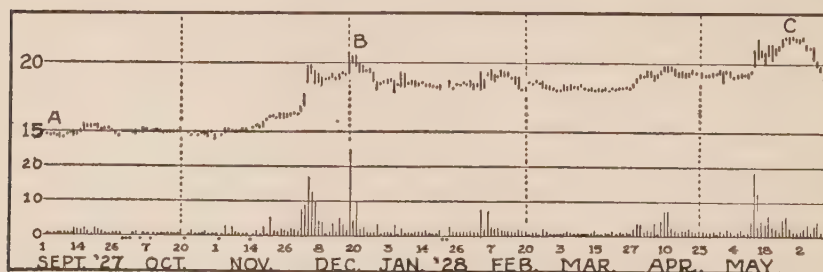


PLATE 91. DAILY CHART ON MIAMI COPPER IN 1927-28

Showing the long Triangles of Accumulation in preparation for the advance shown in Plate 92.

ting under way. Coupled with the fundamental factor of a strengthening market for copper, the buying indications were perfectly clear. Even the "trend line" (H-J) was not broken on the reaction at G, further strengthening the situation. We shall discuss this factor of trend lines later in the chapter.¹

The significant lesson is that the intelligent chart trader buying around 26 at G would have realized a profit of 25 points, or about 100 per cent., by March, when prices reached a high of above 50. The investor who bought the stock around 15 at A would have made a greater profit but he would have had to wait, blindly and patiently, about a year and a half for his profits, whereas the trader could have been putting his market capital to work in other short-term moves during most of that time. The trader, getting

¹ See Page 647.

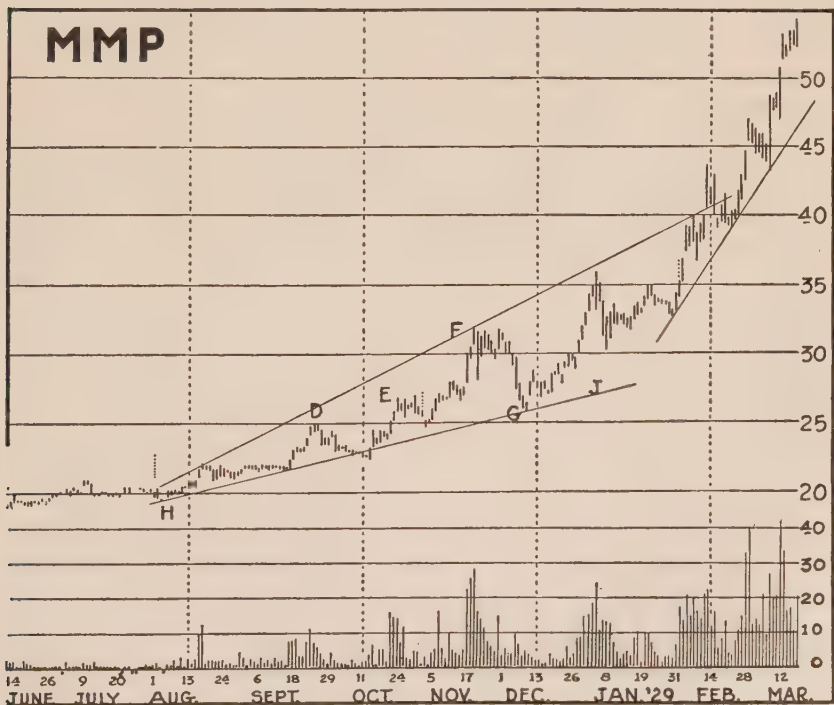


PLATE 92. DAILY CHART ON MIAMI COPPER IN 1928-29

Showing the apex of the Accumulation Triangles begun in Plate 91, and the succeeding advance.

in at G, would have made a little less profit but he would have doubled his money in just three months.

Time Element in a Distribution Triangle

Exactly the same rules apply to long periods of distribution as well as to long periods of accumulation. The longer the triangle, or period of distribution, the greater the ensuing major movement. The rule is well illustrated by the chart on Virginia-Carolina Chemical common stock from September, 1922, through July, 1923, illustrated in Plate 93. The long period of distribution extended from A to B, a period of about six months. The period ended at B, was followed by beginning of the major downward movement, or the marking down stage, only to be temporarily reversed by a surprising "false move" at D, due largely, no doubt, to a technical corner in which professional traders ran in a premature short interest.

From point D, however, the marking down movement continued to shortly before E, with a decline of 20 points, or nearly 100 per cent., in less than five months. The long period of distribution, or the long triangle from A to B, gave some indication that the major movement in process of formation was to be a large one. The fundamental condition of the company and its prospects gave a good indication that the major movement would be downward rather than upward. As a matter of fact, the stock declined further to around \$1 per share and the old company went into receivership by March, 1924.

In our preceding study of common indications of pool manipulation we have stressed the importance of the triangle, whether it be natural or artificial, whether it indicate accumulation or distribution. As a matter of fact, the triangle, or coil, is one of the simplest, one of the most fundamental and one of the most important formations for the chart reader and the technical trader.

In our previous discussion we have studied the triangle as the originator of a major movement. It is quite often a useful indication, however, when, as frequently, it is found inserted during the progress of any already originated movement. We have already

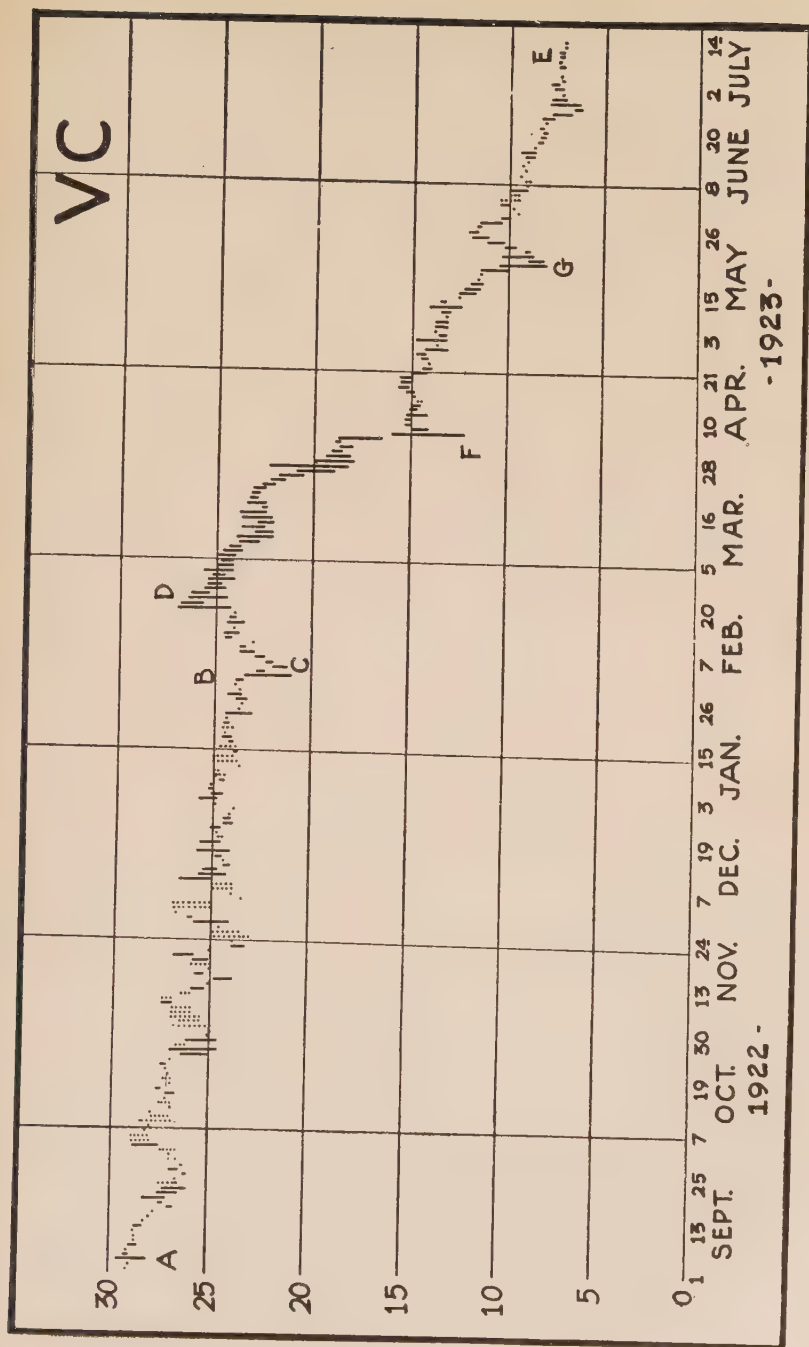


PLATE 93. DAILY CHART ON VIRGINIA-CAROLINA CHEMICAL IN 1922-23.

Showing the long Triangle of Distribution followed by major decline.

seen ¹ that such a coil or triangle may sometimes indicate the end and reversal of the previous movement. In most cases, however, especially in the case of smaller triangles, it indicates that the stock is merely consolidating its previous move, is resting temporarily, and that the previous major movement will again soon get under way. In such case, these smaller intermediate triangles indicate merely a smaller and intermediate period of accumulation, if the major movement is up, or distribution, if the major movement has been down.

Three Major Types of Triangle

Very seldom do we find a perfect triangle or coil. It is almost always irregular. Sometimes it requires a measure of imagination on the part of the chart reader, but after a little experience he can generally spot it quite easily, even in imperfect formation. Roughly speaking, there are three main types of triangle, and this applies also to the large ones which begin or end a movement as well as to the smaller ones which we are here specifically interested in. There are the symmetrical triangle, the ascending triangle and the descending triangle. The symmetrical triangle is nothing but a plain isosceles triangle turned on its side, major examples of which we have already examined.² In chart formation it is the triangle formed by a symmetrical range growing constantly narrower on each side of an imaginary horizontal line extending back from the final apex of the triangle. Fairly good examples of this symmetrical type of intermediate triangle are presented at points D and E in the chart on Worthington Pump, previously presented in Plate 84, on page 609.

The chart on Goodyear Tire & Rubber common stock, presented herewith in Plate 94, also shows a good example of such an intermediate symmetrical triangle. On the hypothesis that such triangles very seldom reverse the previous movement but almost always indicate a strong renewal of the previous major move-

¹ See Chapter XXIV, p. 604

² See Chapter XXIV, p. 606.

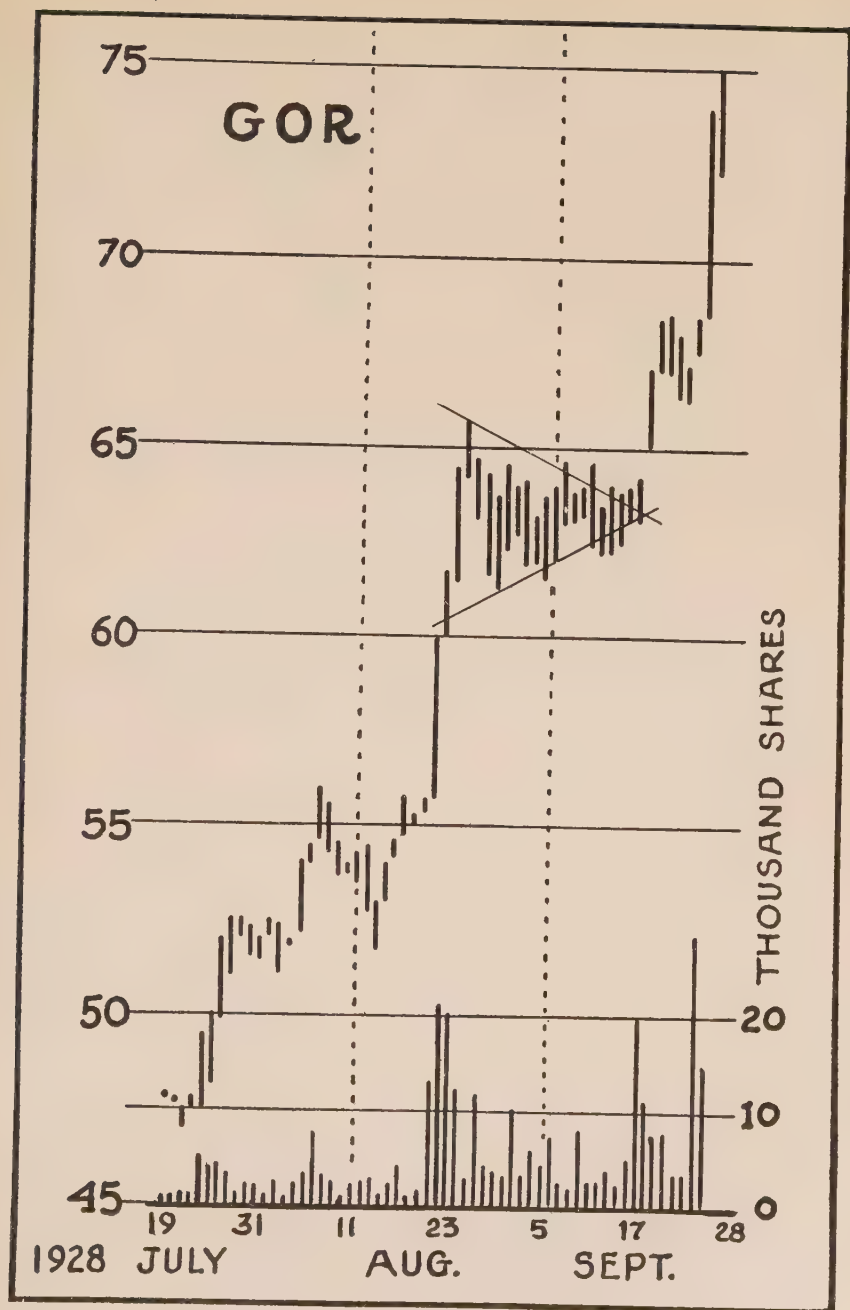


PLATE 94. DAILY CHART ON GOODYEAR TIRE IN 1928.

Showing a good example of the Intermediate Symmetrical Triangle and indicating that the previous major movement is to be continued.

ment, the following advance in the stock might easily have been forecast. Only in very exceptional cases would such a triangle have indicated reversal of the previous upward trend. Such a triangle, if found in a major bear movement, would likewise signal sharp renewal, or continuation, of the major downward movement.

The ascending and descending intermediate triangles resemble right angle triangles turned on their side. In their cases the triangle is composed of two straight lines, forming a right angle, and one hypotenuse line. The direction of the hypotenuse line indicates the probable direction of the future movement. In other words, the ascending and descending triangles are similar to the symmetrical triangle except that the narrowing range is seen only on one side of the base line, the apex line or the horizontal line extending back from the apex of the triangle. The other line, which slopes back away from the base line in the symmetrical triangle, is actually the base line and is therefore horizontal. This formation is the intermediate small brother of the major formations of the descending top and ascending bottom, which we have previously noted.¹

The Descending Triangle

A good, but not perfect, example of the descending triangle is shown in the chart on American Woolen common stock, shown in Plate 95. It will be noted that the hypotenuse or dissymmetrical line of the triangle has a downward slope, giving the triangle its name and indicating generally that the ensuing movement is to be in sharp continuation of the previous major movement. Such descending triangles appear usually as intermediate to a major downward trend and thus promise its continuation, often more sharply than before. If the descending triangle appears in a major upward movement it is more likely to indicate the end or reversal of that movement, often similar to the "descending top" formation. In any case it thus establishes a good "support level," and the holding or breaking of that level then be-

¹ See Chapter XXIV, p. 610.

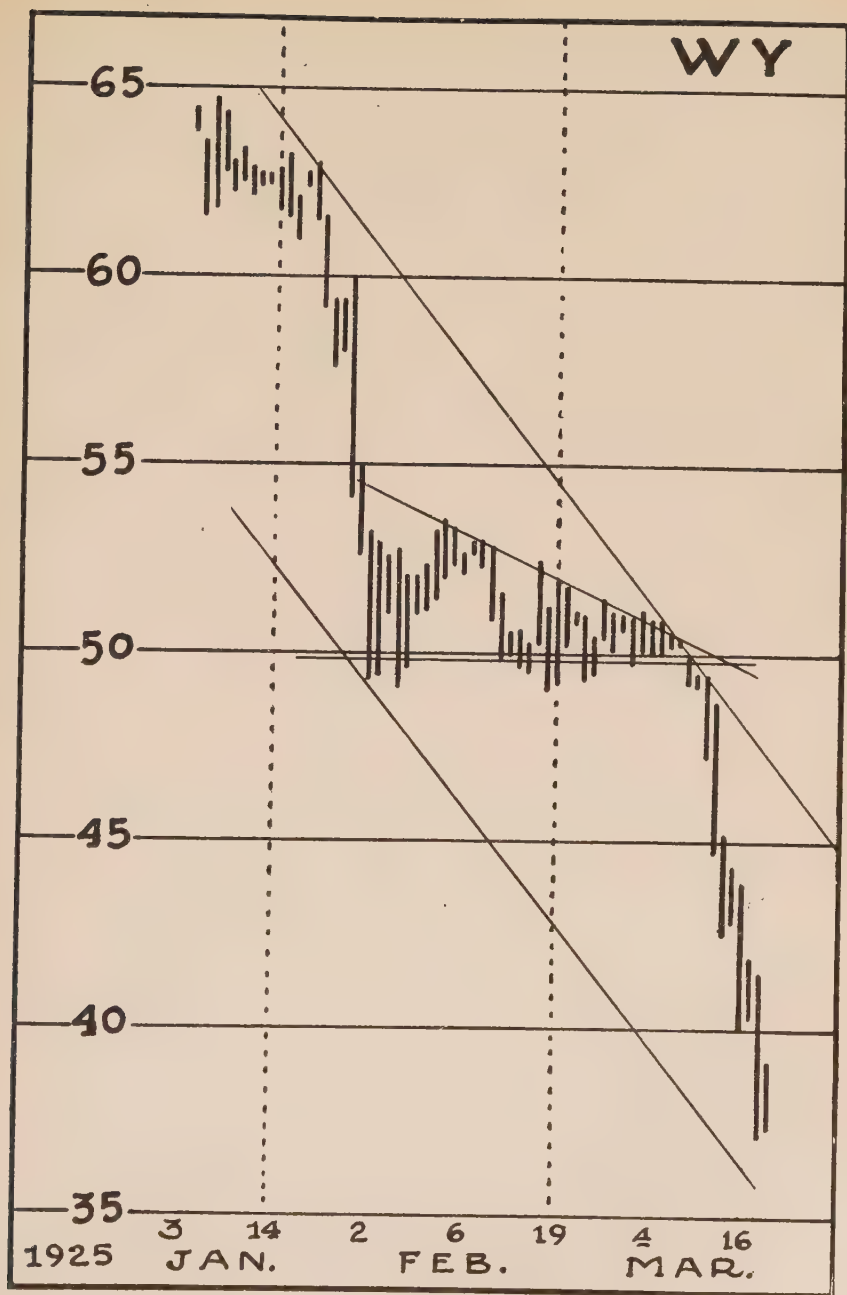


PLATE 95. DAILY CHART ON AMERICAN WOOLEN IN 1925.
 Showing an example of the Descending Intermediate Triangle. Note also the
 Trend Lines. (See page 647.)

comes the critical signal. The difference between the signals of the descending and the symmetrical triangles is that in a major downward movement the descending triangle is a much weaker formation than the symmetrical triangle and generally prophesies a sharper renewal of the downward movement.

The Ascending Triangle

In most characteristics and properties the ascending triangle is just the opposite of the descending triangle. It is one in which the base line holds a straight and horizontal resistance level while the dissymmetrical or hypotenuse line is an ascending one. This type of triangle appears generally as intermediate to a major upward movement, but in any case it is a strong formation. When, as usual, it appears after a major advance has been in progress, it is almost certain indication that the upward movement will be continued and generally at a much sharper and more rapid rate than previously. In the comparatively rare instances where it appears in a major decline it is a strong enough signal to suggest that the downward movement may be reversing itself, and really becomes an "ascending bottom" formation. In any case, a resistance level is thus established, which will be the significant point to watch.

A good example of the ascending intermediate triangle is found at points A, B, C and D, in Plate 96, which shows the chart on Chrysler Motors common stock. The formation indicated continuation of the major upward movement at even a more rapid rate than previously witnessed. There was a short shake-out, in the nature of a false move, but the resulting major movement was clearly a strong upward one.

The Intermediate Triangles

To summarize our group of intermediate triangles, the symmetrical triangle generally indicates merely a continuation of the previous major movement with suggestion of increasing power and speed for that move. The symmetrical triangle is found in

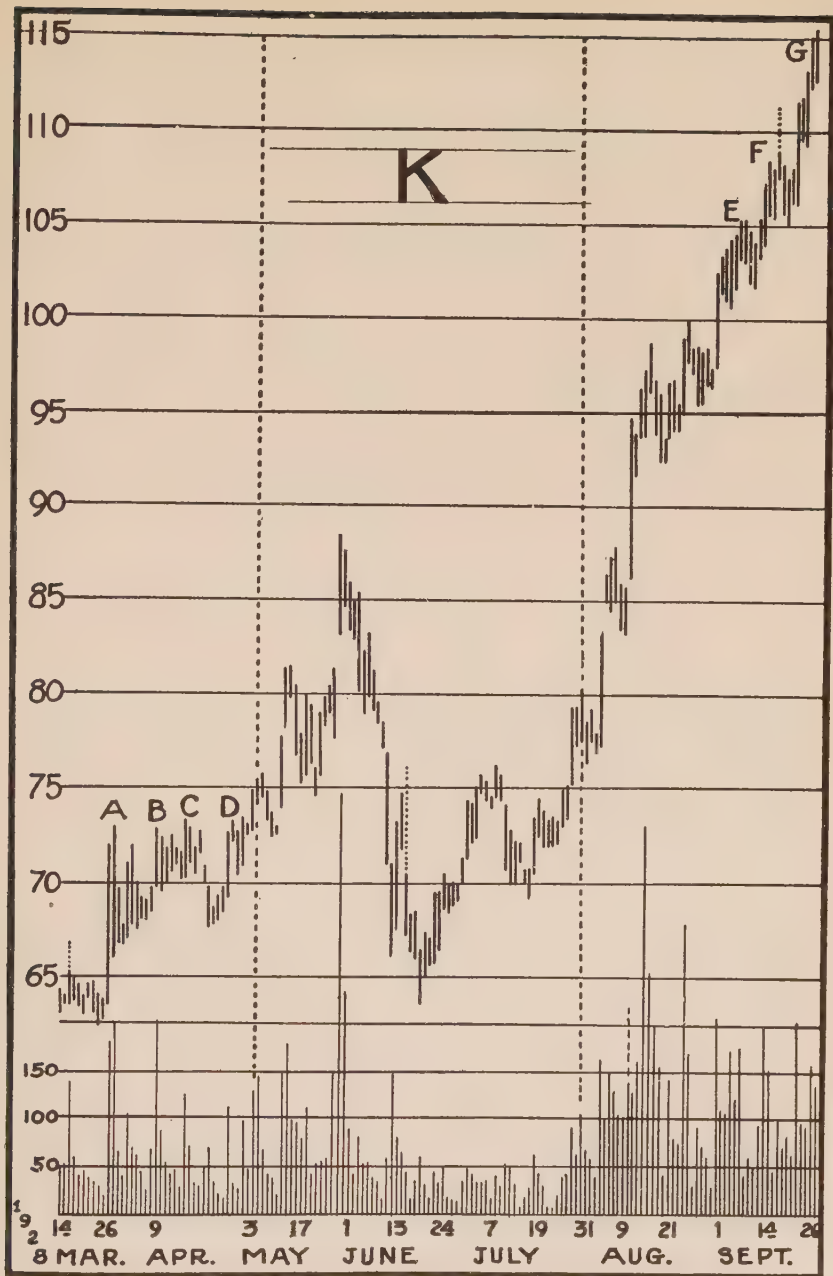


PLATE 96. DAILY CHART ON CHRYSLER MOTORS IN 1928

Showing an Intermediate Ascending Triangle at points A to D, and a series of ascending peaks at points E, F, and G.

both upward and downward movements but more often in upward ones. Partly for this reason it may usually be considered to indicate greater strength than weakness in any movement.

The descending intermediate triangle is a signal of weakness. If it occurs after a major decline, as usual, it promises further and sharper declines. If, less commonly, it appears after a major advance, it more often suggests reversal of such advance. The ascending intermediate triangle is a signal of strength. If, as usual, it occurs after a major advance, it promises even further and sharper advance to follow. If, less commonly, it appears after a major downward movement, it suggests reversal of that movement into an advancing one. As in the case of all technical chart formations, the longer the picture takes to develop, the more important the succeeding move.

The Ascending Peak

There is another less definite but important formation which may be considered merely an exaggeration of the ascending or descending intermediate triangle. This is the ascending peak or the descending bottom. Both of these formations are difficult to describe but are usually quite important from a technical and chart standpoint. In simple language, the ascending peak is nothing more than that. It is a short picture in which each successive day's high is slightly above that of the previous day and each successive day's low is slightly above the previous day's low.

Such a definition is not quite adequate, however, for it is difficult to spot these two formations and they must be learned largely through study and experience. An example of the ascending peak is shown in the chart on Chrysler Motors (Plate 96) at points E, F and G. The entire series of points may be taken to be one more or less regular ascending peak, but, to be more exact, there are really three of these formations, since they are generally very short, rarely lasting more than three to five days. The ascending peak is a rather rare occurrence, found only during major advance. Its significance is that it is a particularly strong signal and almost always indicates a very sharp and profitable further

upward move. It is especially trustworthy when it follows an already sharp and broad run-up of only one or two days, such as the one day's wide advance immediately preceding the ascending peak at point E in the chart on Chrysler Motors, Plate 96. A more normal and usual example is shown at point N in Plate 83, on New York Central. (See page 607.)

The Descending Bottom

Conversely, the descending bottom is a similarly short formation wherein each successive day's high and low points are a little below the previous day's high and low. Here, too, the description

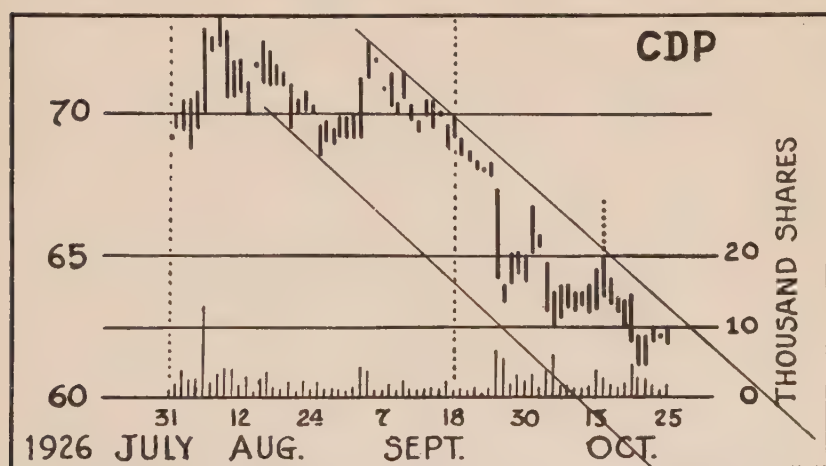


PLATE 97. DAILY CHART ON CERRO DE PASCO COPPER IN 1926

Showing a typical example of the Descending Bottom, during the month of September, which suggested the later decline. Note also the Trend Lines. (See page 647.)

cannot be exact and the chart reader must learn to detect the formation from personal study and experience. An example is shown from about September 7th to 20th in the chart on Cerro de Pasco common stock, in Plate 97. The descending bottom is also rather rare, occurs almost entirely after some measure of previous decline and is an exceptionally weak signal. It indicates much sharper and wider declines than have preceded its formation.

Intermediate Reversal Formations

In this immediately preceding study of triangles, ascending tops and descending bottoms, the formations considered have been chiefly those which indicated continuation of the previous major movement, rather than a reversal of such movement. This type of intermediate formation is called a continuation. We have noted some exceptions which signalled reversal of the previous major movement, but they are exceptions and not the rule in the continuation formations which we have reviewed just previously.

To a large degree the development of intermediate reversals takes the form of small, intermediate formations similar to the seven types of accumulation and distribution which we have previously studied. The difference is that these intermediate reversal formations are not nearly so long or definite as are the basic formations. For instance, if we turn to our previous chart on Worthington Pump, Plate 84,¹ we shall see an example of such an intermediate reversal. At point B we saw the end of a long period of distribution, in preparation for a major decline, indicated by the triangular top and the descending top. At point C, however, we have a very short intermediate reversal. It takes the form of a triangular bottom, a head and shoulders bottom and an ascending bottom.

All three of these formations, we have seen, indicate accumulation. If they were large, powerful and long, then we might call them true accumulation in preparation for a reversal of the previous trend into a major upward movement. In this case, however, as in the case of all such intermediate reversals, the formations are short and weak, indicating a reversal, but also indicating that such reversal will be short and in the nature merely of an intermediate recovery, to be followed by renewal of the original and major movement. In this example, for instance, the intermediate reversal was a short and comparatively unimportant recovery of about seven points, followed by renewal of the major bear movement.

¹ See Page 609.

Irregularity on High Volume Forecasting Reversal

Besides the basic formations indicating major movements and the smaller but similar intermediate formations indicating intermediate reversals, there is a certain special picture which is difficult to classify, difficult to explain, but which should be in the consciousness of every successful student of market action by charts. It is a formation in a major upward movement, which is best described as growing irregularity on high volume. It is perhaps more of a condition than a formation, but the chart indicates increasing distribution and growing weakness of the technical position. If the picture is a long and powerful one it may even indicate reversal of the previous upward movement into a major downward trend. Generally, however, it is merely the signal that a major reaction is forming in a major bull movement, but that such reaction, while sharp, does not necessarily promise permanent reversal of the bull movement.

The best example of this growing irregularity on high volume is shown in Plate 98, the chart on General Railway Signal common stock from spring to fall of 1927. First we see our old friend the triangular bottom, A-B-C, and coming to its apex at D, indicating fairly long accumulation for a major upward movement. Following a short shake-out, or false move to point E, the marking up phase gets under way and there is a wide advance of over 40 points, from 110 to 150 in about two months. But let the reader study carefully the picture of the stock's range between points G and H, and compare that picture with the earlier marking up phase from points E to G. Note the comparatively rapid "straight-up" movement from E to G and then note the growing irregularity from that point to H, the growing nervousness, the sharpness of the movements, the quick reversals, the sudden shake-outs, the equally sudden run-ups into new high ground, perhaps pool manipulation to eliminate premature short interests and give the appearance of great strength to an unsuspecting public.

The higher selling prices of the stock in the later stage may account logically for comparatively wider movements, as we have

previously noted in our discussion of arithmetic and logarithmic scales,¹ but even a logarithmic scale would indicate this growing irregularity, since it is more pronounced than can be explained merely by comparatively higher selling prices of the stock.

The Element of Volume Indicating Distribution

Now let the reader take special notice of the volume factor. He may first note the typical triangular decline in volume in the later stages of the triangular bottom formation from A to D, a sign that the pool was cleaning up the floating supply and would have comparatively clear sailing for its marking up stage. Then note the sudden increase in volume, following point E, a perfectly natural sequence in connection with the rapid advance in the price of the stock.

But now compare the volume from points G to H with the volume from points E to G. The volume chart shows quite similar pictures. In the early stages of both phases volume is exceptionally high, tapering off moderately but still holding far above normal. But if the high volume was justified and healthy following point E, due to the rapid and straight advance of the stock, we cannot say the same of the high volume following point G, because following that point the advance of the stock was not rapid, nor was it by any means steady. The only logical conclusion to draw from this growing irregularity on comparatively high volume was that distribution was going on in the stock, that it was "being handed out" to the public by the pool and insiders, in preparation for at least a major intermediate reaction.

This reaction materialized following point H. Up to point I there was nothing to indicate definitely that the promised reaction would be more than an intermediate one in the same old bull movement. When the recovery at point I spent its force and turned back again the entire formation from G to I was sufficiently suggestive of the head and shoulders top, or the complex top, to indicate that the distribution had been of major importance, that the downward movement was going further than a

¹ See Chapter XXIV, p. 595.

mere intermediate reaction and would actually reverse the trend from the previous major upward move to the following major downward trend.

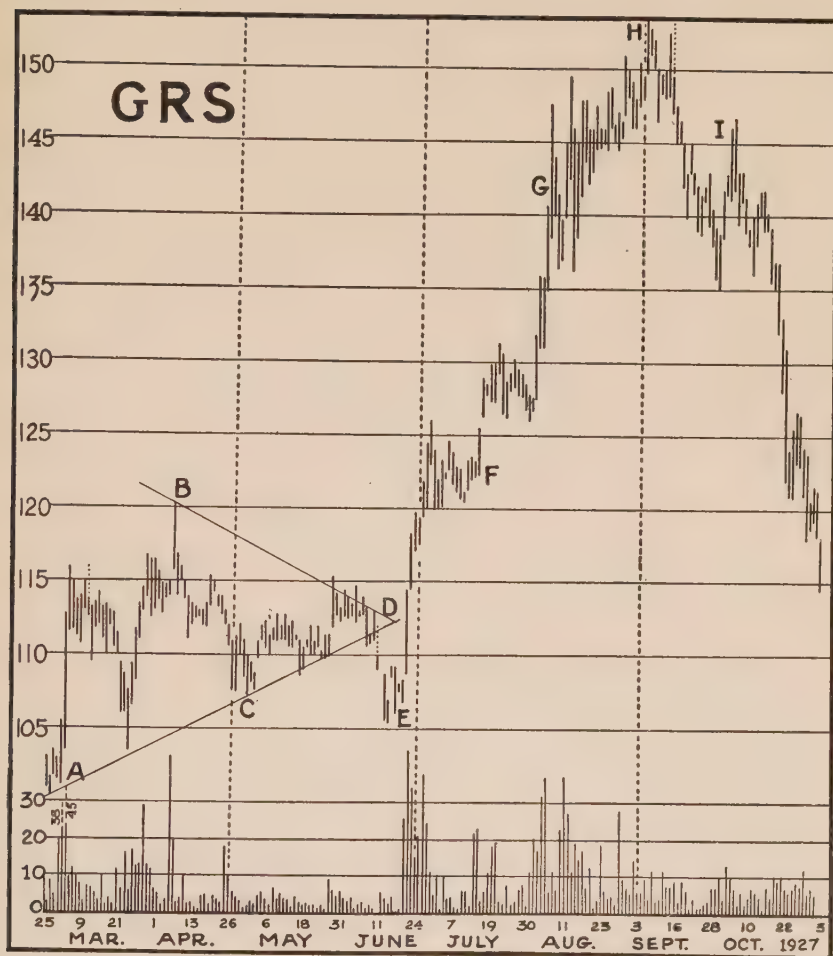


PLATE 98. DAILY CHART ON GENERAL RAILWAY SIGNAL IN 1927

Showing a long Triangle of Accumulation (A-B-C-D), a Shake-out at point E, an Intermediate Symmetrical Triangle at F, and Head and Shoulders distribution from G to I.

This example illustrates the usual measure of importance of the formula of growing irregularity on high volume in a major upward movement. Such a formation, while warning that the

major reaction pending will be sharp and severe, does not necessarily indicate reversal of the previous major upward movement. When it does indicate such major reversal, however, it is usually accompanied by some clearer signal of major distribution such as this head and shoulders top.

Charting the Resistance and Support Levels

We have been introduced to resistance and support points in our previous chapter on how to take the worry out of trading.¹ We may now get a better idea of what they are by observing their formation through the convenient medium of charts. In our previous study we learned that support and resistance levels are valuable aids in trading because generally they are not broken. And in such exceptional cases where they *are* broken by any material move this fact alone is a good indication that the preceding movement has been sharply reversed and will continue further and more rapidly in the new direction toward which the break has occurred. The trader is therefore able to make money whichever way the stock goes, by switching quickly from one side of the market to the other.

Recurrence of Support Points

Let us first look at a typical example of the support level by turning back to page 607 and examining once more the first chart on New York Central Railroad common stock in Plate 83. The support level here was fixed over a considerable length of time, is not exact in each instance, but is approximately between 153 and 158. The first support point is seen at 153, following point A. The next two come at 156 at point Y. The final support points appear at point Z, this time also at 156. The support point, as an important technical factor, became apparent on the recovery following point Y. Thereafter, as the stock declined toward Z, it might have been assumed that this support level would hold and the stock would recover from the approximate level of 153 to 156.

¹ See Chapter XXII, p. 542.

Trading on the Support Point

Trading on this formula the correct action would be to buy the stock first at around 160, perhaps take on a little more at 158 and perhaps a little more at 157. The most important part of the position, however, would be to have one's order already entered to reverse the position automatically ¹ at perhaps 151 $\frac{3}{4}$ stop, that is by giving an order to sell twice as much as was already held in case the stock broke its support point by any material margin. The assumption is that the stock will hold its support level, but that if it does not then the indication reverses swiftly to one of continued weakness, and by switching to the short side when such weakness is indicated the trader can not only make up his original loss but quite probably accept a worth-while final net profit from the entire campaign. As generally happens, in this case the support level held at 156 and was followed by the swift advance to 190. The original long position would therefore have been maintained, since the stop order was not reached and long profits would accrue from the position.

Incidentally, in connection with the chart on Central, one of the fine but practical points may be noted with regard to reading charts. If the chart were not read back to point A, the reading before and immediately after point C would indicate a weak position since the picture just after C is that of a declining bottom. It did not, in this instance, guarantee a sharp further decline, however, for several reasons. First, the picture was not a good one since the declining bottom did not follow a short, sharp drop. Second, and most important, was the support level already established which negated the weak signal of the declining bottom.

The Support Level Broken

But what if the support level *had* been broken? We have seen that the chart trader must be prepared for such an occurrence as

¹ See Chapter XX, p. 496.

he was in the case of the support level for Central. If we go back to Plate 97 on Cerro de Pasco we shall see a good example of a support level which *was* broken. Here the level of support was short, rather quickly established and therefore not so likely to hold. Other considerations, fundamental and technical, suggested that it would not hold, but for illustration the case will serve our purpose.

The support level was established just below 69 on three successive bottom formations. Our formula would call for purchase of the stock around 70 with a stop order to reverse position at about 68. The long position would have been automatically switched to a short one on about September 21st and the subsequent profit on the short sale would theoretically have more than made up for the initial loss on the long purchase. Once more the theory works out, that when a support level is broken to any material extent, the stock may be expected to continue downward still further, since breaking the support level is generally a signal of definite weakness.

The same theories and formulae apply to consideration of resistance levels. A typical example of a resistance level which held is shown by the chart on Chrysler Motors common stock presented previously in Plate 96. Points A and B indicated formation of the resistance level at a little above 72. When the stock approached that level a third time at C it might have been sold short on our theorem, with a stop order to reverse the position at, say, 74, that is, to buy twice as much stock as had previously been sold short if the resistance level was broken by any great margin.

The same theory applies here. The chances are that the resistance level will not be broken and that the stock will react downward. But if the resistance level should be broken on the up-side, then the picture shifts quickly to one of definite strength, indicating that the movement has reversed to a strong upward one. The trader's position is therefore automatically reversed if the resistance level is broken, and his long profits more than make up for his initial short loss. In the case under observation, the immediate resistance point held firm at around 73, the stop order was

not executed and the short position soon showed a good profit, even though the resistance point was broken only about a week later, signalling the beginning of another strong upward move.

The Resistance Level Broken

For an example of a resistance point which was not held, we may turn again to the first chart on New York Central common in Plate 83 on page 607. We have noted that a support point at around 156 in this stock was held at point D. We may now turn our attention to a resistance point which had also been formed at a little above 165. At point H we have the original resistance level at 166. The resistance level grows constantly more definite and more important by its recurrence at points J, K, L and M. At any of these later points, notably L and M, the stock might have been sold short on our theorem, with a reverse stop. In both those cases the sale would have resulted profitably.

Switching the Position

Again, the stock might have been sold short as it once more approached its resistance level at point N. The short sale would have been protected by the usual reverse stop order¹ at perhaps $167\frac{3}{4}$. The assumption, once more, is that the resistance level will be held and the stock will decline, but that if the resistance level is broken it will indicate quick reversal of form from weakness to decided strength, and the position will be automatically switched to agree with the change in technical indications.

In this case the resistance level did not hold but was broken, and the stock advanced rapidly and sharply for a gain of 25 points in less than two months. The breaking of the resistance point, when the stock went through the reverse stop price of $167\frac{3}{4}$, instantly and automatically switched the trader's position from short to long, however, and the resulting profit more than made up for the small loss accepted on the original short commitment.

¹ See Chapter XX, p. 496.

Reversing the Market Position with Stops

The efficacy of having such stop or reverse stop orders "in the market" or placed with the broker, instead of merely keeping mental stops, is conclusively demonstrated in this case. Since the stop order was already entered at $167\frac{3}{4}$, the trader's position was switched automatically as the stock advanced during that single wild day's advance, and the reversal was probably made at around 168 or but slightly above. If the trader had not had his stop order "in the market" he probably would not have been "on the job" closely enough to give his order until late in the day or perhaps not until the next day. The stock ran up to above 173 on this same day that the resistance level was broken, and the trader would therefore have had, theoretically, to execute his reversal of position at around $173\frac{1}{2}$ the next morning, or more than five points higher than if he had had his automatic stop order in the market.

The Shake-out or False Move

We have previously referred to shake-outs or false moves.¹ They are short, but often sharp, intermediate moves in the opposite direction from the major movement expected or finally materializing. There is perhaps no formation more disheartening, or more conducive to loss of market position and financial loss than this type of move. This is largely true because no ironclad or adequate defense can be set up against the operation and effects of these false movements, either in theory or in practice.

They are one of the most certain indications of pool or artificial manipulation of any individual stock, for they are purely artificial movements to catch the unwary trader and cheat him out of the profits he deserves from an otherwise profitable commitment resulting from his correct analysis of such major manipulation. The shake-out, or false move, is especially trouble-

¹ See Chapter XXII, p. 537, Chapter XXIII, p. 579, etc.

some, because in many instances where the picture is not so clear as might be wished it is difficult to judge the difference between a pure false move and a move which indicates that previous analysis has been wrong and that a reverse movement must be expected.

Defense Against the False Move

About the only defense against such false moves is the placing of stop orders far enough away from support or resistance levels to reduce the chance of their being caught by these false moves. For the redeeming feature of the false move is that it is short and generally does not go very far. That is the reason why in our previous illustrations of resistance and support points we have been careful to note that the breaking of such levels is not definite unless they are broken by a decided or material margin, and that is also the reason why stop orders are placed at least a point or more above resistance levels and below support points.

We have previously¹ called attention to the false move, or shake-out, at the point following C in Plate 83, showing our first chart on New York Central. The chart reader was justified in deciding that Central had been under accumulation, that the stage was over at point C, and that the stock should then start into its marking up stage. The stock actually went through a false move, or shake-out, first, however, and this false move would have been extremely troublesome had it not been for the support points previously established and which held at point Z, from which the true major upward movement materialized.

In judging the difference between false moves and movements which actually reverse the chart reader's previous analysis the factors of volume and closing prices have important places, and it is largely for this reason that they should be included in any ideal chart system. Generally speaking, a false move will show comparatively high volume, indicating that the insiders are temporarily playing the opposite side of the market from the movement. If the movement does not show any increase in

¹ See Page 606.

volume it is more likely to suggest continuation of the move into more than a false one and perhaps actual reversal of the major direction.

Shake-outs and Closing Prices

The factor of closing prices is especially important in shake-outs. Having completed its accumulation, for instance, and brought the stock range to the apex of its coil or triangle, the pool will figure, quite correctly, that many traders have sensed their accumulation, expect the stock to go up, have bought it, but have it protected by stop-loss orders, or even by reverse stop orders. The pool, therefore, engineers a quick false move, or shake-out, sending the price of the stock sharply down perhaps two or three points, catching the close stop-loss orders and thus buying for the pool's further account the stock thus automatically thrown on the market.

The pool cannot risk leaving the stock down long, however, and on a real shake-out the recovery is just as rapid and just as sharp as was the original shake-out. The movement is generally entirely over in a couple of days, or a couple of hours. The indication of such a shake-out, therefore, is sudden increase of volume on such a movement, with the closing price back up near its normal levels once more.

False moves and shake-outs may materialize, of course, on the up-side as well as the down-side. An example of the former is seen in Plate 84, the chart on Worthington Pump common stock. At point C we have an intermediate symmetrical triangle, indicating that the downward movement will be resumed. When the apex of the triangle is reached, however, there is a sharp but temporary upward movement, in the nature of a shake-out or false move, prior to resumption of the correctly expected major downward trend. Here again, however, the factor of comparatively high volume would tend to disclose the run-up as merely a false move.

Perhaps the best example we have seen thus far of a shake-out, or false move, was in Plate 96, the chart on Chrysler Motors

common stock, at point C. The ascending triangle ¹ gave almost perfect evidence of continued sharp upward movement of the stock, but before the major upward movement was actually resumed there came a short but sharp and disappointing shake-out. In this case the evidence of volume was not so clear since there was no very definite comparative increase in trading during the shake-out. The last upward move before the shake-out began, however, was on very small volume, indicating that the insiders were not trying to dispose of stock on that rise and improving the technical prospects accordingly. Again, on the second, and worst, day of the actual shake-out there was an appreciable increase in volume of trading which, while not large enough to be conclusive, might nevertheless have suggested the probability that the movement was a false one and that the insiders were garnering as much stock as they could on the move.

The Technical Trend

We have become familiar with the more common types of support and resistance level, but they have a rather distant relative which it may pay us to note in the form of technical or chart trends. A technical trend is a more or less hypothetical and symmetrical path which, applied to an individual stock chart, is designed to indicate the limits of the stock's range as it tends to move either upward or downward over a period of time.

Such technical trends are constructed by drawing light parallel lines, preferably in pencil, through two or more terminal points in the stock's previous range. Continuations of these parallel lines into the future on the stock chart are designed to indicate the future trend of the movement and show the limits of its future terminal range.

It is the author's opinion that the importance of such chart trends is generally over-emphasized by chart readers in general, but their intelligent use often results in good profits. We have had numerous examples of such chart trends in the illustrations already studied. In Plate 83 on New York Central we first find a

¹ See Page 632.

fairly wide downward trend by drawing parallel lines through the highs at B and K, and through the low at Y.

Considering merely this technical chart trend and without regard to any of the other principles or formulae illustrated by this picture, the stock should have continued downward. Instead, however, it broke through the down trend at point L. The chart trend thus gave a signal of reversal and after some intermediate reaction and irregularity indicated that a new upward chart trend would be established. This new upward trend was fixed by the upper line, C, E and F, and by the lower parallel line, D, P and Q. The stock, based on this theory alone, was a buy at N, a sale at E, a buy at P and a sale at F. All of these indications were correct and the commitments would have been profitable if actually made.

At point Q, however, there was another buying indication which did not work out, indicating that the long upward chart trend had been broken, and that after irregularity and some recovery a new downward chart trend should develop. The intermediate recovery ended at G and, all things considered, the selling indications at that point were very clear.

Illustrating the Technical Trend

Plate 99, showing the chart on Radio Corporation common from March, 1926, through the end of that year, gives us another very good example of the technical trend. Originally, the base line L-M indicated the upward trend and point A fixed the upper parallel line. The stock was therefore a buy all the way from L to M, was a sale at B, C and D, and again a buy at N. The sale points did not work out very well and suggest that chart trend lines are much more dependable for operations in accord with their trend. In other words, buying points are more dependable in an up trend than are selling points, while in a down trend the selling points are more dependable than the buying points. This is logical since the intermediate movements of a stock are not so dependable as the movements in the direction of its major course.

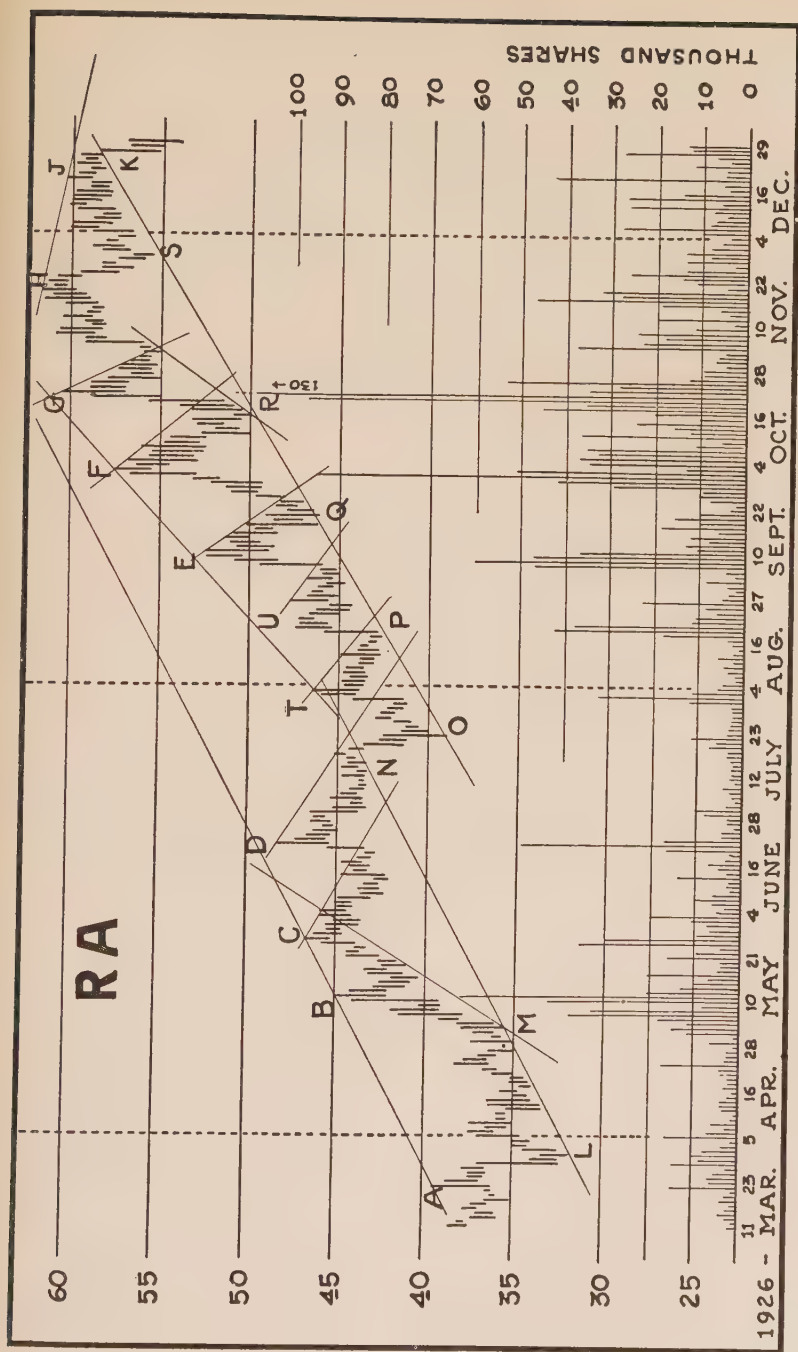


PLATE 99. DAILY CHART ON RADIO CORPORATION IN 1926

Showing a variety of Trend Lines and Intermediate Trend Lines. When the stock broke down through its Trend Line at point K, it gave a bearish signal which was followed by a major decline to around 40.

However, some reaction developed after points B, C and D, and a short position at those points was safe so long as the upper trend line was not broken, illustrating another use for the stop-loss order in connection with chart trends. At point N, another buying indication is seen, but the stock broke this lower trend line to point O. For a short time, therefore, reversal of the upward trend was suggested but not for long, since the stock almost immediately rallied through its intermediate chart trend line, D-P, and by the time point P was reached there was sufficient evidence to place a new chart trend line, O-P-Q-R, which replaced the old one, L-M-N, and was still parallel to the upper chart trend line, A-D.

With the new and broader chart trend in force, points P, Q and R were all additional buying indications and worked out quite profitably. The fact that points E, F and G did not come up to the upper trend line indicated that weakness was developing, however. This theory was further strengthened by the poor showing at H and again at J, where the picture was exceptionally poor. Only the most inexperienced chart trader would have been long of the stock at point K without having his position protected by a stop-loss order or a reverse stop order at around 57. As a matter of fact, the weakening of the picture from point G on was a correct signal; the stock broke out of its long chart trend at K and continued to decline back to around 40.

Intermediate Trend Lines

This same chart (Plate 99) is a good medium for illustration of the occasional value in using what we are pleased to term intermediate trend lines. These are single short straight lines indicating short intermediate movements which are counter to the major movement. They are indicated on the chart extending down and to the right from points C, D, T, U, E, F and G. They are not to be confused with the weak signal of the descending top, since they are a much shorter and minor formation. Such intermediate trend lines, though counter to the major movement, indicate continuation of that movement and are, it might be

said, "set up merely to be broken down again." They are equally useful in major downward movements, though that is not saying much, in the writer's opinion.

As a matter of fact, we offer this study of chart trends and intermediate trend lines only with the warning that they should not be trusted too far. Even in the comparatively successful examples which we have scrutinized, various imperfections are apparent. Such chart practices are very often profitable in themselves, but, in general, they should be used only as an aid, and their chief danger lies in placing too much faith in them alone to the exclusion of other important considerations.

The Trading Gap or Spread

The laws of action and reaction account largely for still another technical chart tendency which is very often valuable, especially in short-turn trading. This is the use of formulae for covering gaps in chart trading. A chart gap or spread is a vertical gap, or open space, between one day's range and the next. It means that the low of one day is higher than the high of the previous day or that the high of one day is lower than the low of the previous day. This results in "open water" or a gap between the two days' ranges. It is easily seen that such a spread results from a sharp jump or drop in the price of a stock.

The theory is that sooner or later the stock will return and "cover" this spread or gap. Usually the spread is covered very soon, perhaps the next day. Sometimes it is not covered for months. In rather rare instances the spread is never covered and, as usual, the rule therefore has its exceptions. When the spread is not covered it is almost always followed by a very long and profitable major movement in the direction of the original spread.

The Break-away Gap

The exception is very important, however, for it comes generally at a particular stage in the market formation and forecasts

the beginning of a sharp, long and profitable movement in that direction. This exception is generally found after any of our seven cardinal formations indicating either a major advance or a major decline to follow. Perhaps the most common of these formations, as we have seen before, is the triangle. During the formation of such major pictures there may be many gaps, all of which will be subsequently covered as the major formation progresses toward completion.

As the triangle narrows down to a point, however, or we deduce from our previous experience with the seven major types that the formation of accumulation or distribution is coming to an end, we may begin to expect this exceptional gap formation which, unlike its brothers, is not to be covered. This type of gap constitutes the "breaking away" from the previous formation which prophesied the coming move. Whether it be on the up or the down side, it is one of the best indications that the major formation is legitimate in forecasting a major movement and that such major movement has now begun.

It is the stamp of approval on the student's previous analysis of the preceding formation. It is only logical, therefore, to anticipate that, since the looked-for movement is now under way, it will continue rapidly and strongly, and that this primary, or "break-away," gap will not be covered, at least not for a good long time to come.

The Exhaustion Gap

The other important type of gap is that which follows a long straight-away movement in either direction. This is the "exhaustion gap," which is almost a certain indication that the long and major movement is being exhausted and is near its end. This type of gap is almost always covered very shortly after it is made, for it indicates that the previous major movement is giving way to a reversal. Such reversal may be quite long and deep, often amounting to a more or less permanent reversal of the major move. It is a signal to switch to the opposite side of the market from the previous major move, and the fact that the fore-

casting gap of exhaustion is covered at an early date does not signify that the original direction will again be resumed, or nullify the general warning of further major reversal away from the previous movement.

The Three Types of Gap

We now have three chief types of gap. The first is the intermediate, or common, gap, formed in ordinary trading, often during formation of one of our seven cardinal pictures, and almost always covered at no very distant future date. Due to the narrow swings accompanying such formations the trader will not make a great deal of money by playing for this common type of gap, though if he is agile, wide-awake, and wants to "scalp" the market, this common gap is almost infallible.

The second type of gap, we have seen, is the "break-away" type. It follows the major formation, indicates the beginning of the major move previously forecast by the developing picture of accumulation or distribution, and is very seldom covered. It may be used best to check up on the correctness of the previous analysis, and as the final signal to get aboard for the profitable excursion.

The third type of gap, we have seen, is the "exhaustion" classification. It comes at the end of a long, swift and major movement, indicating the end of that movement and its major reversal. It is, therefore, almost the opposite of the break-away gap, which comes at the beginning of a long and profitable movement. The exhaustion gap is quite accurate and is a good signal that the previous major movement is near its end and that the trader's position should be switched in preparation for another major movement in the opposite direction within the near future.

All three types of gap may be found and used either in an advancing or a declining market, being equally profitable in each case. They are not 100 per cent. reliable, but they are among the most accurate and reliable signals which the market student may discern in the study of charts.

Chart Examples of the Gap

The reader can find innumerable examples of common gaps being covered, by observation of almost any normal stock chart he cares to examine, including the examples used in this chapter to illustrate other formations. He will also be able to find the comparatively rare exceptions and to note the rule that such exceptions indicate very strong major movements to follow. The importance of the formula that most spreads are covered is perfectly apparent from the standpoint of practical trading. So long as the trader feels fairly certain that the stock is going to cover its spread he can tell just what price the stock will reach in the near future and can take a position in the issue with this factor as its basis. Due to the major movements which occasionally result from the exceptions to the rule, the importance of stop-loss protection in trading on this formula is clear.

Plate 100, showing the chart on Du Pont de Nemours common stock from October, 1927, to March, 1928, is replete with samples of this theory and shows a satisfactory number of very good examples. In all, the chart shows 17 gaps or spreads. Of this number all but one were covered. The best examples of sizable spreads which were soon covered are seen at points A, B, C, D and E. At point F we have the single exception to the formula, in the break-away gap. This was not covered and indicated the major upward movement was getting under way which carried the stock up to 395 inside of a month after the spread was made. The stock tried to cover the spread in a later reaction but could only get down to 341 in June of the same year, 1928. Thereafter the major advance was resumed with renewed vigor and the stock went forward on another spectacular movement into new high ground for all time.

The break-away exception is perhaps more important than the rule. It might have been suggested by the long triangle of accumulation ending at D, by the slight false move, or shake-out, which followed, by the impressive show of strength at E, which carried the stock into new high ground and practically guaranteed that the marking up process had been begun, by the second shake-

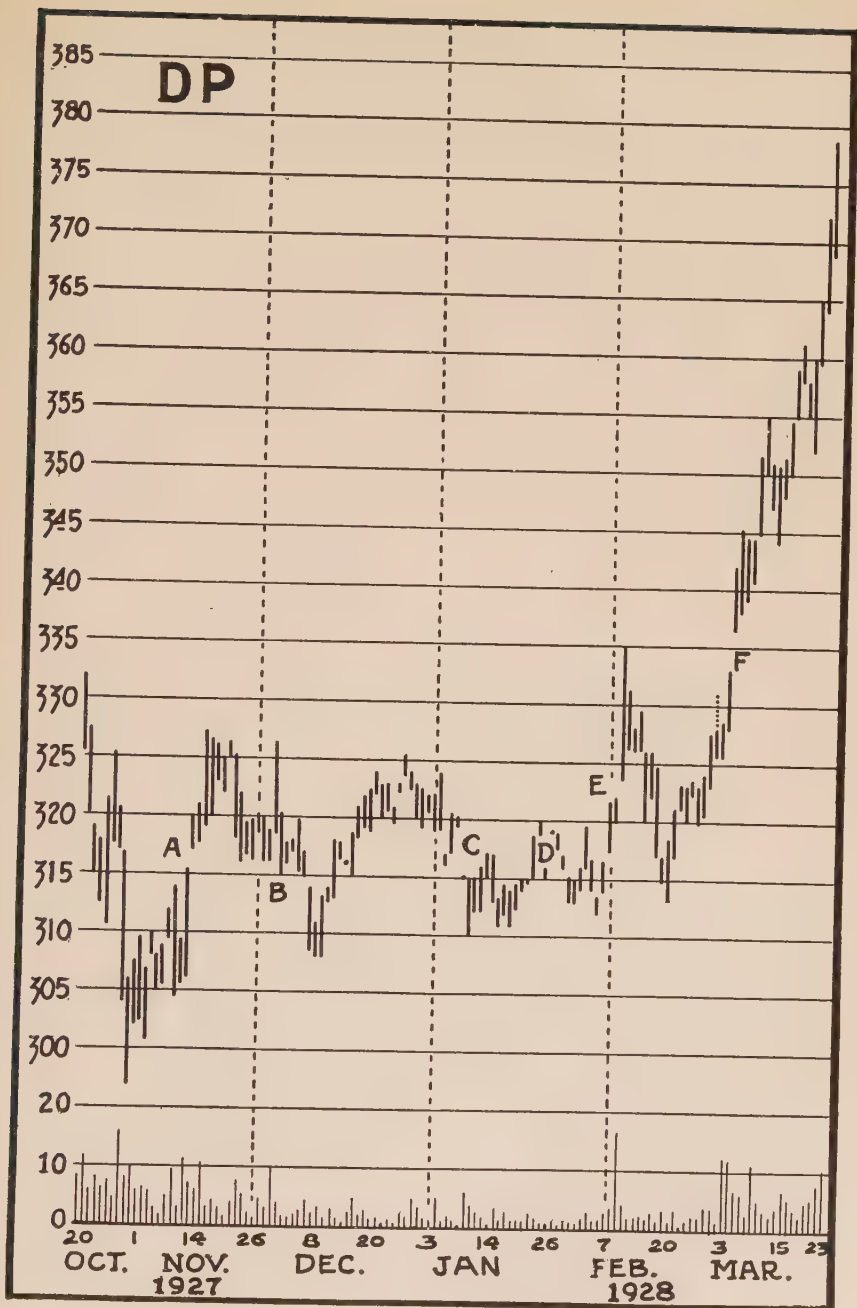


PLATE 100. DAILY CHART ON DU PONT IN 1927-28

Showing various examples of the Common Gap or Spread. Note that all were covered except the Break-away Gap at point F which signalled the upward move.

out and the renewed strength at F, to say nothing of the additional signal of strength presented by the spread carrying the stock into new high ground on the upward movement.

A good example of the break-away gap is shown in the chart on Radio in Plate 77, on page 563, at the very beginning of the long and sharp upward move, following point A. Likewise, in the same chart, the end of the long upward movement was accurately prophesied by the exhaustion gap around 210, just before point F. An exhaustion gap is shown in Plate 83, on New York Central, following point P. In Plate 92, page 625, showing Miami Copper, there are two break-away gaps, one between points D and E, and another just following point G. The chart on Virginia-Carolina Chemical, in Plate 93, page 627, shows a rather belated break-away gap on the down-side at point F.

Summary of Important Chart Formations

We have now become familiar with the more common code of chart reading and chart trading. A brief summary may assist the student in co-ordinating the various theories and formulae in review.

A. Common Basic Formations Indicating Major

ACCUMULATION	DISTRIBUTION
1. Head and Shoulders Bottom	Head and Shoulders Top
2. Common Upward Turn	Common Downward Turn
3. Triangular Bottom	Triangular Top
4. Ascending Bottom	Descending Top
5. Double Bottom	Double Top
6. Complex Bottom	Complex Top
7. Broadening Bottom	Broadening Top

B. Types of Continuation Triangle

1. Common, or Symmetrical, Triangle
2. Ascending Triangle
3. Descending Triangle

C. Other Types of Continuation Formation

1. Ascending Peak
2. Descending Bottom

D. Types of Reverse Formation

1. Minor Editions of the Major Formations under A.
2. Growing Irregularity on High Volume (in Bull Move)

E. Miscellaneous

1. False Moves and Shake-outs
2. Support Points and Resistance Levels
3. Technical Chart Trends
4. Intermediate Chart Trends
5. Gaps
 - a. Common Gap
 - b. Break-away Gap
 - c. Exhaustion Gap

In our discussion of these various formations and technical insignia we have applied them only to individual stocks. They are more valuable and more commonly used in this fashion, but, in a broader sense, practically all of these theories and formulae may be applied with considerable value to the reading of any composite chart of stock market movements, whether in the study of group movements or the fluctuations of the general market. In the next chapter we shall see how some of these formations aid in suggesting future long-term movements of the entire stock market.

CHAPTER XXVI

LONG-SWING MOVEMENTS

The Trader vs. the Investor

In the last several chapters our study has been devoted chiefly to consideration of the technical factors affecting stock market fluctuations. We have previously seen that such factors work much more swiftly and profitably than do the fundamentals. The technical side of the market is of special importance for the short-swing stock market trader — he who tries to take his quick profit and run, and then renew his operation in some other issue where technical considerations suggest another movement is about to materialize.

As opposed to the short-swing trader, the long-swing investor is concerned more with fundamentals. They act more slowly but they also act much more surely, and since the investor does not care to take the time necessary for mastering the technical situation, he is content to place his investment and then wait for perhaps several years to realize his anticipated gain.

The long-swing investor may profit from our previous study of technical considerations, while the short-swing trader will certainly profit by a study of the more fundamental considerations which influence long-swing movements. The reader must decide for himself whether his stock market commitments are going to be for the short-swing or the long-swing. It is important that he make that decision before he enters the market and not afterward. Success in stock market operations comes to the individual who has a definite campaign mapped out in advance, who knows where he is heading and who clings to his original ideals without regard for the psychological influence of market action, so long as his original theories are not proven by such market action to be incorrect.

And nothing brings failure in stock market trading so often as vacillation, due to the lack of any definite plan, in maintaining the principles of that campaign. The individual should know before he makes his commitment whether he is investing or speculating, and whether he is campaigning for profit merely for a short-term commitment or planning to hold his position for a comparatively long period of time.

The Pull vs. the Swing

So far as the time element is concerned, the short-pull commitment is one made for only a short period, while the long-pull commitment is one made for a comparatively long period. So far as market movements are concerned, the short-swing commitment is one made with the idea of profiting from a short movement in a stock, while the long-swing commitment is one designed to profit from a comparatively long-time movement. The "pull" refers more to the time element. The "swing" refers more to the element of market movement. The long-pull investor ignores intermediate declines, while the long-swing investor will sell if he thinks the next major swing will be downward.

The comparative attractions of long-swing and short-swing trading in the stock market depend largely upon the individual. If he is willing to give a large share of his time and energy to study of the market and of technical considerations similar to those studied in previous chapters, and if he has the proper ability and the proper personal make-up, then it seems quite certain that he will make greater profits by short- than long-swing trading. Certainly, the possibility for such profit is much greater in short-term trading.

On the other hand, the individual who is unable or unwilling to give up a good portion of his time and energy to a study of technical considerations, who knows or finds himself erratic in his trading success or unfitted psychologically for short-term trading, will, of course, find greater profit, slower but more certain, by confining his operations to those for the long-pull or the long-swing.

Long-Swing vs. Short-Swing Operation

Since the professional stock market trader is a comparatively rare animal, since his life is not of the happiest or most serene, since he is constantly taking considerable risks and under the greatest of mental strains, it seems fairly certain that the majority of readers will find greater eventual profit, together with serenity of mind, in confining most of their operations to long-swing investment rather than to short-swing trading.

Most of the arguments against short-swing trading may be eliminated if such operations are kept relatively low and the risk maintained at a small figure. There is no reason, therefore, why the average individual should not combine a measure of short-swing trading with his long-swing investment program. The latter should carry the bulk of his capital and risk and he should be certain before making any commitment which classification of his activities it is going to be in.

When we approach the subject of long-term investment it is profitable to take up a study of past history regarding the fluctuations of general stock market prices, or averages, just as, in our study of technical considerations and short-term trading, we studied the past history of individual stocks to determine how best we could gauge their probable future actions. A glance at the chart in Plate 101,¹ showing the fluctuation of average stock market prices from 1872 to 1930, will suggest the tidal, cyclical or up-and-down movement of such indexes.

Cyclical Swings in the General Market

Study of any such records of past market history will show that the market never moves upward indefinitely and that, conversely, it never moves downward indefinitely. Past large upward swings have always been followed by large reactions. Past downward swings have always been followed eventually by renewal of the upward swing. In a broad and general way it appears that over the greater portion of past stock market history

¹ See Opposite Page 675.

these peaks and valleys of price fluctuation recur fairly regularly and are often called cycles.

A cycle in any market, any series or any chart is nothing more than the fairly regular recurrence of such peaks and valleys, alternating up- and down-swings at fairly regular intervals of time. Technically, a cycle is the complete picture of one such full swing, involving its four parts — the bottom, the upward move, the top and the downward move, which last returns the index to the approximation of the bottom from which it started.

The Business Cycle

The stock market cycle seems to be pretty well bound up with the business cycle, and the holding of one theory leads fairly directly to the other. If we accept the principle that either business or the stock market moves in accordance with regular cyclical law, then we have a good basis for believing that the other of the two also operates according to that law. Just as the stock market cycle has its four stages, so the business cycle also has its periods of depression, revival, prosperity and deflation, the last leading back once more to the starting point of trade depression.

Many authorities link the activity of both the business and stock market cycle with fundamental conditions, especially the credit position. In his "Financial and Business Forecasting," Dr. Warren F. Hickernell¹ postulates the development of the cyclical phases largely on the "Law of Loanable Funds," and proceeds to justify his theory in a practical manner through a theoretical cycle, as follows:

"The cycle begins [in depression] with an abundance of loanable funds . . . and plentiful bank reserves relative to loans. Thereafter,

"1. The abundance of loanable funds causes interest rates to fall.

"2. The fall in interest rates causes a rise in the price of bonds.

"3. The rise in bonds facilitates new financing and stimulates expansion in construction work of a permanent nature; and this

¹ See Bibliography, page 834.

involves an increase in the demand for labor and building materials. Wages and prices rise.

"4. Rising prices of commodities and enlarged wage payments require increased commercial loans; there is an increase in the circulation of bank notes; higher interest rates follow the depletion of banking funds.

"5. The rise in interest rates restricts the sale of new securities; permanent construction and merchandising are restricted. The prices of commodities fall and pay-rolls shrink.

"6. The fall in prices and reduced merchandising are attended by reduced loans; wage payments and trade remittances are less, so that the supplies of note currency and gold in circulation become redundant; the amounts in excess of current needs flow back to the banks.

"7. The reduction in bank loans and the return flow of gold and note currency to the banks spell an increase in loanable funds; interest rates fall. We now have the conditions witnessed at the beginning of the cycle, and the old cycle merges into a new one."

Limitations of the Cycle Theory

Much more than this has been written regarding the occurrence of such cycles in the stock market. The author is not dogmatic about the subject, but there seems no very satisfactory evidence that cycles in the stock market can be depended upon to any very definite degree. The usual time for the completion of a normal cycle is generally placed at from three to six years, with most authorities favoring the five-year cycle. But the time limit, while always present, cannot be set with sufficient accuracy to warrant much dependence upon it in forecasting future movements.

Neither can the cycle theory help us much in determining how far the various major movements in the stock market will go. Theoretically, the completion of the cycle brings the index back to its starting point. Practically, and in the stock market, allowance must be made for a certain "secular trend," or the tendency

for increasing wealth, increasing population, increasing demand and higher standards, to keep the general movement, or the broad trend, always tending upward, so that each cyclical low point is lower and each cyclical high point is higher than the previous one. Even on such a basis the theory has failed to work out in the long bull market of recent years, wherein the average indexes advanced much higher and much longer than would have been prophesied by the cyclical theory and the principle of secular trend.

Advantages of the Cycle Theory

While granting the aid of the cyclical theory in both business and the stock market, therefore, it does not appear that we shall find in this theory, any more than in any of the others we have observed, the golden key to definite, constant or automatic profits and success in the stock market. The cyclical theory is merely one of the aids in successful stock market operation, and it is particularly helpful and particularly important to the long-swing investor.

It is important, if for no other reason, because its principle is dependable. The law of cycles will not tell the long-swing trader when a major movement is going to end, or how far it will go before it ends, but it does promise him that every major movement, in the stock market as well as in business, does have an end. There have been times in recent years when it appeared that the cyclical principle was in the discard, that the long bull market, eclipsing anything in past history and breaking the usually respected rule for time duration and length of movement in cycles, had nullified the cyclical principle. Such principle is basic and fundamental, however, and only the radical theorist would declare that it no longer exercised any influence or presented valuable suggestion in forecasting major stock market movements.

Granted that the stock market does move somewhat, at least, in consonance with the theory of cycles, that theory in investment operations is apparent. If the market were going to continue in a major upward trend forever, then the long-pull investor would

be justified in his course. He could wisely invest in the general market with the idea of holding forever. But if we admit the principle of cycles, then we must also admit that the general market does not advance constantly but is subject to major reactions as well as major advances. Such an assumption gives the advantage to the long-swing investor, the investor who invests for comparatively long periods but who also tries to take advantage of the cyclical theory and the recurrence of major swings of the market.

A Statistical Study of Five Methods of Stock Trading

In judging a study of the comparative profits in long-pull and long-swing investing Laurence H. Sloan presents some enlightening calculations in his volume on "Security Speculation." Mr. Sloan takes a list of 18 individual stock issues and studies their price fluctuation during the 12-year period from 1914 to 1925. He assumes in his first test that an individual buys a certain stated amount of each stock on the first day of each year throughout the period. At the end of the period he would have had a profit of 21.2 per cent. per annum for the 12 years.

In the second test he shows that the individual who bought a certain stated amount of each of the 18 stocks in 1914 and held them straight through to the end of the period would have realized a profit of 32.1 per cent. per annum. In the third test the more logical assumption is made that the investor bought the stated amount of the stocks at the average, or mean, price on the first upward swing of the 12-year period. This swing was in 1914-17 and the mean price was reached in October, 1915. The stocks bought at that time and price would have yielded a profit of 12.5 per cent. per annum through the entire period under consideration.

The fourth test is on the assumption that the investor bought the stated amount of all 18 stocks at the peak of the 1914-17 upward swing and was therefore "hung up" with his long-pull purchases for a considerable time. Even under these unfavorable and discouraging conditions the investor would have found him-

self with an average net profit of 7.1 per cent. through the entire test period.

The final test is designed to illustrate the comparative advantages of long-swing investing over long-pull operation. In this test the individual takes advantage of the long-term fluctuations or cycles in the market movement. He plans to realize a certain profit from each major upward movement, get out of his 18 stocks before the next major decline and then buy back again in preparation for the next major upward swing. He does not sell short and he does not buy on margin. But he does utilize the profits of his previous transactions in his subsequent ones.

Results of the Five Tests

The difficult point in such a test, of course, is to set a fair price at which the long-swing investor would get out on the upward movement and re-enter the market for the next major up-swing. Mr. Sloan has found four definite up-swings in the 12-year period under consideration. He assumes that the theoretical operator executes his change of position at the average price ruling in each stock for the month in which the major movement was reversed and also the months directly preceding and directly following the base month. He buys and sells, therefore, at the average price prevailing over the three-month period closest to the turn in the major movement of the general market.

Results of this test show that the long-swing operator would have realized an average profit through the period of 73.2 per cent. per annum. This rate of profit is more than double the best made by any of the other tests of long-pull investment.

In the individual study of United States Steel common stock Mr. Sloan shows that the fifth test, the long-swing, gave a net profit of 54.8 per cent. per annum throughout the 12 years, against 18.4 per cent. for the first test, 39.3 for the second, 12.9 for the third and 5.1 per cent. for the fourth. The full results of the various tests will be found summarized in Appendix J, on page 828.

Importance of the Study

Mr. Sloan's study does not pretend to prove that the average stock market operator would have achieved the exact results arrived at in the different tests. He realizes, as we must, that it is much easier to calculate what any market commitment should have been after its long-term results are apparent than at the exact time when such commitment should actually be made. The weakest part of the study is the method of arriving at the buying and selling points for the long-swing trader in test five, but even here it is doubtful if any better basis could be arrived at. The general weakness of the comparative tests is merely their theoretical nature, which is so at variance with actual stock market operations as conducted by any average individual.

To credit such an average stock market operator with the sagacity to sell his stocks within a month and a half of the highest point reached on the advance, and buy them back within a month and a half of the extreme low reached in the major downward movement, is endowing one's theoretical investor with a supernatural eye of stock market prophecy. It is easy enough to do when market history has unrolled, but there were several points in each major movement where the long-swing investor might easily have guessed incorrectly that his major move was over and made his commitments either too soon or too late, with considerable resultant loss.

Results for the Long-Swing Trader

With such exceptions, however, the tests are highly instructive from a theoretical angle. The man who invested every year during the 12-year period made 21 per cent. per annum profit. The man who invested all his capital at once and held on, the true long-pull investor, made 32 per cent. The true long-swing investor, who guessed the major turns, won out by a large margin, with an average annual profit of more than 73 per cent. Allowing even for the practical failure of the human trading element, as outlined above, Mr. Sloan's valuable study seems still to

indicate that long-swing investment is more profitable than long-pull investment.

On the other hand, the latter form of operation is not, therefore, to be condemned. Allowing for the error of the human element, the long-swing trader was probably not so very far ahead of the long-pull investor. Furthermore, the long-pull investor was practically certain of eventual profit, whereas the long-swing operator was always in danger of selling out too soon, losing his position and being left out of the market while it went on up. Add to these considerations the comparatively greater amount of psychological serenity and freedom from worry of the long-pull investor and there is perhaps not so very wide a margin of advantage for the long-swing method.

Results for the Long-Pull Investor

The results of the fourth test are perhaps even more significant than the others. For here there is no room for fooling oneself about where he would have bought his stocks. They are assumed to have been purchased at the very highest price of the first major bull market in the period. The individual could not have used poorer judgment, or made a less wise choice of the time to buy, then he did in this example. Yet if he had had the courage of his convictions, had followed through his original intention to hold for the long-pull and had stuck with his commitments through good times and bad, he would still have realized a market profit of over seven per cent. per annum through the 12 years covered by the test. Even despite the fact that the test period closes with prices at the highest they had ever previously attained, the results attest to the fundamental logic of buying common stocks for long-pull investment.

The chief difficulty, from a practical standpoint, with this theory is that it is doubtful if the average operator would have continued to carry his entire commitment through intermediate reactions for the long-pull. It is only necessary to glance at the chart on average market prices to get some idea of the mental state of this long-pull investor at the bottom of the declines in

1917 and 1921. Having in each case already suffered a loss of around 30 per cent. of his original capital, with all advices recommending constant sale of stocks, with the usual bear market elements of impaired confidence, declining earnings and all the other discouraging accouterments of long bear campaigns, it is improbable that the average investor will continue to hold doggedly on to all of his long stocks throughout a major bear market.

Danger of the Long-Pull Method

In fact, he is much more likely, let his original intention be what it may, to decide that at least some of his stocks are not so strong as he thought, and so reduce his risk by selling at least a portion of his "long-pull holdings" at just the wrong time; perhaps, at just about the bottom of the major bear movement, when the pools and insiders are making things look as discouraging as possible, with the express idea of inducing the public to part with their stocks and aid the professional elements in their accumulation for the advance which will shortly get under way.

This is one of the chief reasons why the author believes in long-swing trading rather than long-pull trading. We have admitted the very definite advantages of the latter form of operation. It is the "human element" which we fear and which upsets the theoretical picture. If the average investor did not generally buy near the top, if he would disregard all propaganda at the close of long bear markets, provided he has truly sound stocks, and would actually stick to his original intention of holding for the long-pull, then the advantages are clear. But few average individuals can resist the potency of bearish propaganda after their stocks have gone down and down, and it is this practical factor which militates against long-pull profits and long-pull commitment.

There is one other psychological, or human, factor which makes it more advisable to attempt long-swing trading rather than long-pull operation. That is the additional fact that even if the long-pull operator holds grimly on to the stocks he bought much higher up his normal judgment is so biased by the psychological

effects of his paper losses that he almost invariably refuses to buy at the bottom of a long bear market, which is only the truly correct time to accumulate stocks for long-pull investment.

The Psychological Handicap of the Long-Pull Investor

It is almost impossible for the long-pull investor, who did not take his profits at the top, to resist the attitude of the long-swing investor, or even the short-swing trader, at the bottom of the market. That attitude is one of selling and it has no place in our definition of the long-pull investor. He never sells. But if he wishes he had sold at higher prices, then he becomes, in his heart, a trader and not an investor, or at least a long-swing investor rather than his previous ideal of a long-pull investor.

With regrets constantly in his mind, therefore, as the prices for his sound stocks sink lower and lower, it is almost impossible for the long-pull investor to bring himself to risk more of his capital while prices are low. Often his capital is tied up in the stocks he bought higher up, whereas the long-swing trader who got out near the top has free capital and a much saner psychological outlook. Besides the profit which the long-swing investor has lost at the bottom of a bear market, therefore, and whether he is stampeded into selling at low prices or not, he is not in the proper psychological frame of mind to risk additional capital in buying more stocks at a time when he should be doing so.

The Investment Trust

Within the past decade the investment trust idea has risen with startling rapidity and has seized upon the public imagination as the ideal answer to this whole problem of long-pull investment. Why not give one's capital into the hands of a specialized group who make it their business to study market action and prospects and act accordingly in the interest of their stockholders? From a theoretical standpoint, the answer seems easy. But it is also a lazy man's answer.

There is no question that the management of many investment

trusts is far superior to the management of many individual investors. But it is also true that there were, during 1929, for instance, more investment trusts with inferior management than with truly capable and fearless management. In the last analysis, the comparative merits of any investment trust depend almost entirely upon this quality of management and no blanket recommendations or appraisals of the group as a whole may be offered.

The most dangerous factor has perhaps been one of cupidity, both for the trust and for its investors. During the long bull markets of recent years, a multitude of trusts sprang up whose sole purpose seems to have been one of promotion and temporarily easy raising of capital. On the other hand, the investor, used to easy profits in the stock market and to constantly advancing prices, was not satisfied with safe returns but demanded such high income and high profits that his trust managers were forced to accept risks which they knew were dangerous.

Analyzing the Investment Trust

With the passing of unhealthy inflation in the speculative markets toward the close of 1929, many investment trusts of the weaker class were weeded out. All of them were fairly well bumped, despite good management. In general, their position as a group seems to have been improved. But, once more, the astute investor must investigate before he invests in any investment trust. He should know management, bookkeeping, investment policy, past earnings, balance sheets and net worth, and should compare all these combined factors with the price which he must pay for his investment in the trust.

In short, he is multiplying his risk in one single management, or company, just as much as he is diversifying his risk indirectly and ultimately through letting one agency do his investing. For that reason, he should be infinitely more particular about his original investigation and investment in such an important trust than he would be in a single investment in the general stock market.

Types of Investment Trust

Roughly, there are two major types of investment trust. The British, or management, type controls its officers by comparatively loose rules. The management has free discretion as to how funds are used. The American, or unit, type of trust is bound down much more, generally putting its funds immediately and permanently into a certain fixed portfolio of stock investments, without personal power of the management to withdraw such funds except under very unusual circumstances.

Here, again, no blanket differentiation may be made, for there are good trusts in both classifications. If management is good the discretionary trust would appear nearer the ideal advantages which the trust is supposed to give — that is, expert management of investment funds. For long-pull investment and safety of income, however, the fixed type also has its advantages.

Long-Swing Trading as an Ideal

It should be perfectly clear that the author has no quarrel with the individual who wishes to be free from all worry or attention to stock market fluctuations and who will buy stocks for the long-pull and stick with them through bear markets and bull, regardless of the short-term outlook, only so long as he knows that his stocks are basically sound and strong ones.

On the other hand, it should also be perfectly clear that the author does not place enough faith in human nature to feel that the average individual will do all these things. As one considers the greater profits theoretically, and practically, accruing to the individual who will develop his judgment of the market, give it a reasonable amount of time and study, and relinquish the desire to squeeze the last point of profit from a long advance, the advantages of long-swing trading appear incontestable.

Calling the Turns for the Long-Swing Operator

How then shall the long-swing investor know when to buy and when to sell? Once more we must discourage the reader against

any illusory hope of finding anywhere some automatic formula which will guide him 100 per cent. correctly. Only long study, long observation and long market experience can bring him to an approximation of correct judgment along these lines. But he may take heart in the knowledge that there are plenty of signals, plenty of suggestions and plenty of important considerations whose knowledge will aid him in this ability to judge future trends, in which, after all, is the basis of all successful stock market operations.

First, there are the fundamental considerations which affect the entire market and so determine the long-swing course of general stock prices. They are largely a composite of the fundamentals which we have studied in connection with the future course of individual stocks. Basically, the chief one is the potential income to owners of stocks, and that means the trend of corporation earnings. And corporation earnings, by and large, are dependent upon general business prosperity. The fundamental key to the future course of the general stock market, therefore, is the outlook for business and industry.

If we could construct an index of business which would show us its state three to six months from the present time we should have a good forecasting index for the fundamental stimulus of stock market fluctuation. Even this statement, however, is not infallible. Indexes of various types of raw material production, advance orders, etc., give some clue to the future of business, but they give only a clue. And even if the future course of business could be definitely known in advance, there are the more technical factors to be considered, which may suspend the action of fundamentals for anywhere from three months to a year or more, or may hasten their action by an equal time interval.

Correlation of Business and Long-Swing Stock Movements

There have been various studies and various attempts to correlate, or compare, the state of industrial activity with stock price movements. We have previously examined, in Plate 72, on page 463, such a chart, comparing a representative and reliable in-

dex of business with the 60-year index of stock prices. They move almost always quite close together. But which is first? Does business turn up before the stock market, or does the advance in the general market build up confidence and lead to a revival of business? Does the market wait for a definite decline in general prosperity before turning down, or does the stock market discount business depression in advance?

No definite answer can be given. The Wall Street credo, held also by many authorities in economics and business, is that the stock market discounts business anywhere from a few months to nearly a year in advance. The rule is not sufficiently dependable to show its own proof, but it seems logical and the author is inclined to agree that the stock market anticipates major swings in business.

This assumption also appears quite logical in practice, since a large portion of stock holdings are concentrated in the hands of high business executives who can see a change in business coming far in advance, or who generally realize that it has arrived before the general public is apprised of its presence through the medium of past records and statistics. The professional and inside elements of the stock market are also likely to get such news in advance, and the discounting of future business developments is thus partly completed before the actual record of the developments are made public.

Forecasting the Business Future

The logical method left for the market student to forecast how the stock level will fluctuate with business is to become sufficiently familiar with the factors which influence business to forecast the turns for himself without depending upon the past records of statistics to apprise him of a turn in prosperity.

We saw earlier in this chapter ¹ how the credit situation plays a chief and logical role in the influence of future business and prosperity influencing the business cycle. We have also seen that, while the cyclical principle is not to be trusted too far as regards

¹ See Page 661.

signals for the exact date of reversal, one of its valuable functions is that it warns us pretty definitely of what the next phase, the next turn, is going to be. If we know what stage of the business, credit or stock market cycle we are in it is fairly easy to forecast what the next phase will be, and we can thus be on our guard for its first symptoms.

The 60-Year Stock Index

The credit situation is therefore the most logical and the most dependable factor to watch in forecasting business and, through business, the future course of the general stock market. The long-term index of representative stock market averages from 1872 through 1929, shown in Plates 72 and 101, is not only instructive in itself but is especially interesting when viewed in connection with interest rates, which are the physical indexes of the credit situation.

The stock market index was constructed by the author in his former capacity as a member of the financial staff of the Reports Department of the Federal Reserve Bank of New York. Details of the rather involved construction of the index series are given in Appendix K, on page 829.

The lower line on Plate 101 is the index of the varying monthly rates charged in New York City for call money. The call money rate is considered the most sensitive of the interest rates and thus furnishes a good index of general credit conditions, and since interest rates generally move quite closely together, it may also be taken as a general index series for time money, commercial paper, and even as an approximate index of the Federal Reserve Bank rediscount rates, since that system has been in operation.

Correlation of Interest Rates and Long-Swing Stock Movements

The reader will see for himself that, while there are various exceptions, it is a general rule that declining interest rates usually forecast rising stock prices, while advancing interest rates

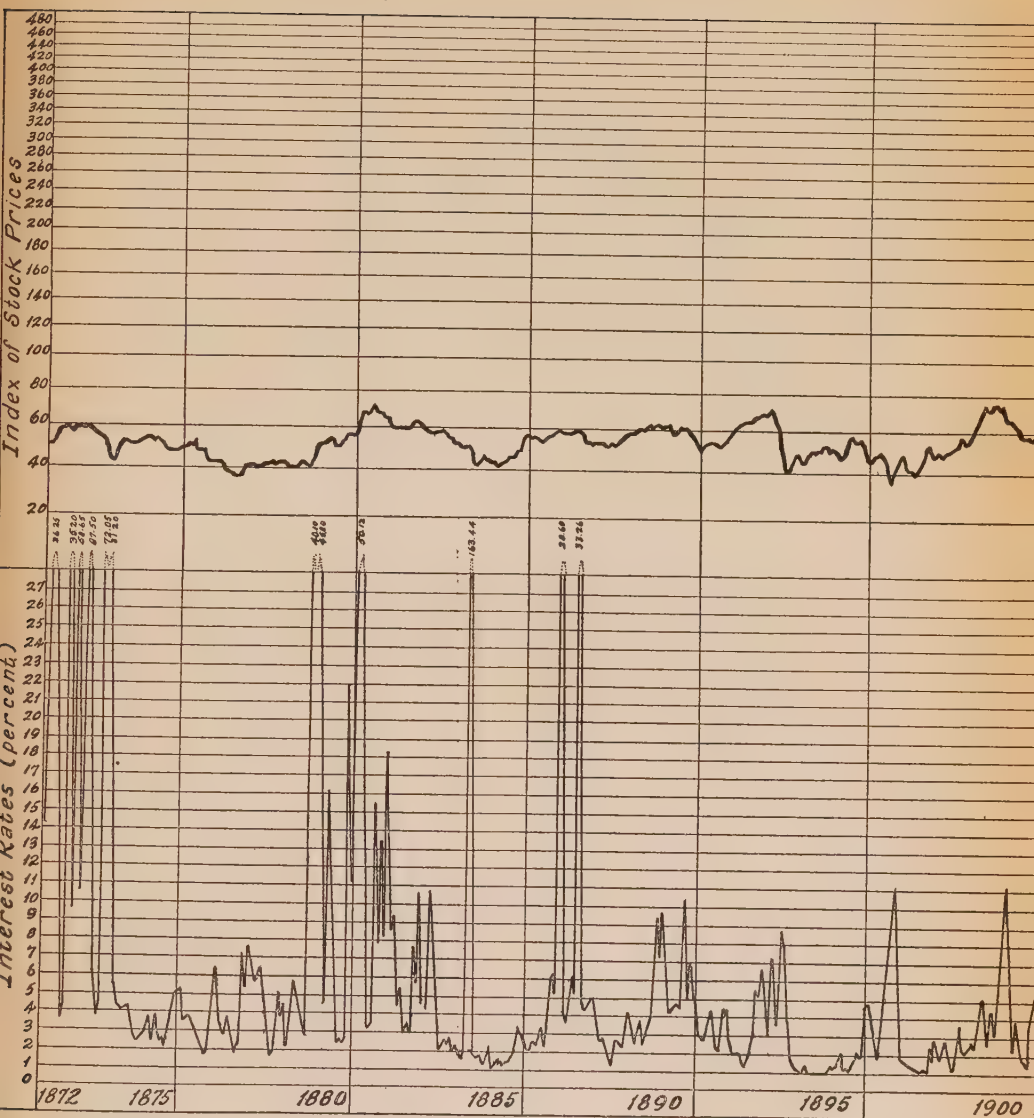
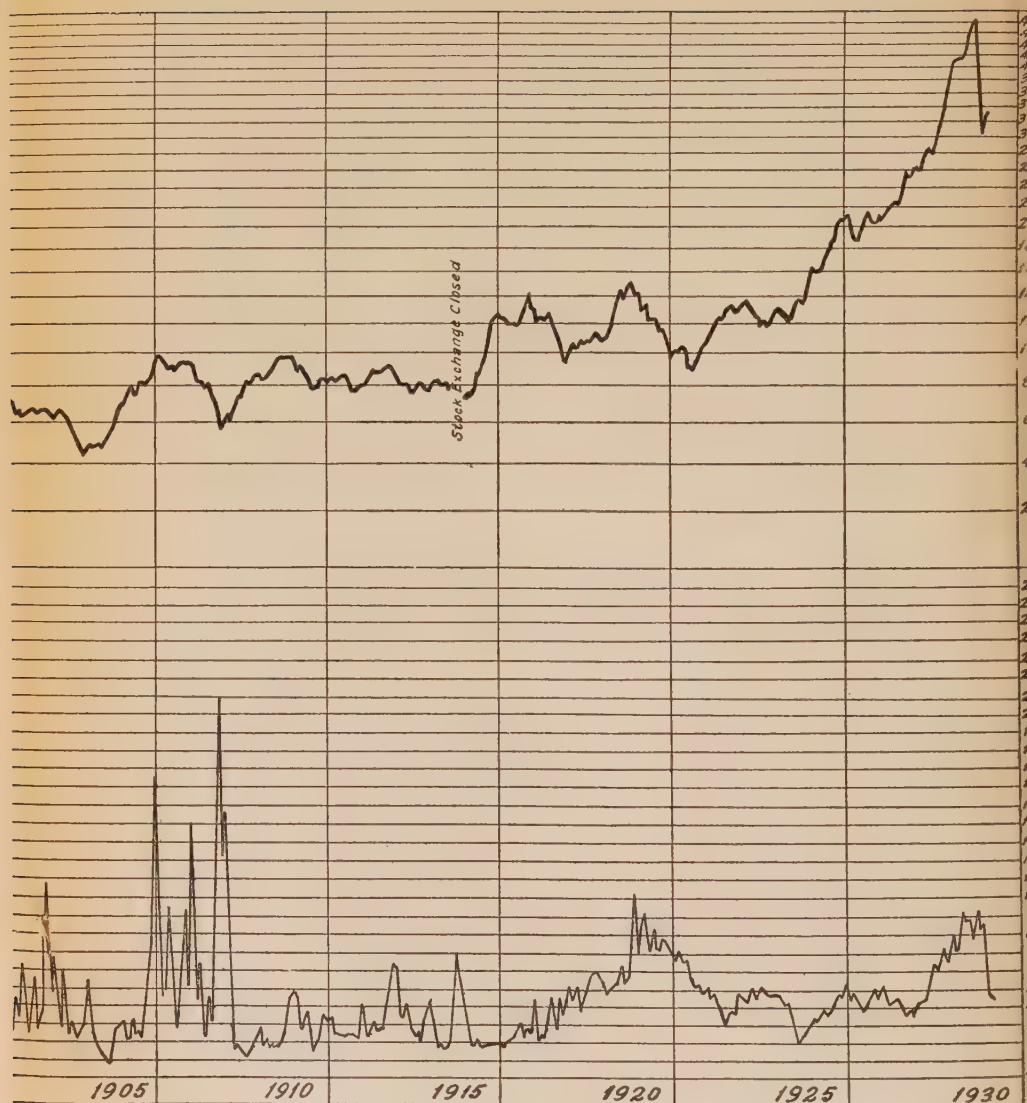


PLATE 101. THE 60-YEAR STOCK INDEX

The stock index is based on the Dow-Jones averages from 1914 to date. Detailed construction in the New York market, fluctuations flattening out



AND INTEREST RATES COMPARED, 1872-1930.

It is explained in Appendix K on page 829. The money index is made up of call money prices considerably since the beginning of the Federal Reserve era.

usually forecast a downward turn or reversal of the major movement to declining stock prices. It is easy to understand why business is fundamentally affected, over the long-term, by interest rates. When money is easy and interest rates are low, bond prices are high, and it is easy for corporations to finance expansion. When credit is tight, bond prices low and financing through bonds relatively difficult, the tendency is for corporations to conserve their resources, since additional funds are hard to get. Thus expansion is curtailed and business gradually declines.¹

This was the previous "old-fashioned" theory. Proponents of the recent long bull market argued with considerable justification that, so long as the stock market is booming, corporations can raise all the additional capital they want through that medium of credit, regardless of interest rates or the bond market. This is approximately what occurred during 1928-29. Bond financing dropped to the lowest levels in many years, but new financing through corporate stock issues advanced to new high records and industry was able to raise its capital through this medium instead of through the bond market.

The Lag Between Interest Rates and Stock Movement

Such developments have tended to discredit the old cyclical theory of credit and business, and they account largely for the fact that business held up longer in the recent era of prosperity than normally. The transformation has been by no means complete, however. The fact that corporations were able to raise additional funds through stock issue rather than through bonds is more an indication that high interest rates in 1928 and 1929 were to at least some degree misleading, for the public had plenty of money to finance the stock market, and corporations therefore had plenty of credit themselves.

Fundamentally, in the author's opinion, the old rule still holds that advancing interest rates, when they are genuine and when they prevail for a sufficient time, foretell a decline in business and in the stock market. The usual period of "lag" between interest

¹ See Page 662.

rates and the stock market is supposed to be from three months to about 18 months. In other words, the appearance of abnormally high interest rates need not affect the stock market for three to 18 months after their appearance. The normal lag appears to be somewhere in the neighborhood of six months, though it was nearly 20 months in the bull market of 1928-29.

The Credit Situation as a Technical Factor

Theoretically, therefore, interest rates affect business and business affects the stock market, so that interest rates give a fundamental clue to the future direction of major stock market movements. From a more technical angle, interest rates also exercise a definite effect upon future stock market movements. We are familiar with the manner in which the bulk of speculative activity in the stock market is financed through margin trading,¹ call money, brokers' loans and the like. We have seen that rising interest rates mean added expense for such speculative operations. Interest rates advance until they reach the point where the game is no longer worth the candle, where speculative profits, for the public, insiders and pools, no longer compensate for high interest charges. The result is suspension of such speculative operations for the rise and resulting decline of the market. Here the call money rate is perhaps more important than the other credit indexes. It fluctuates comparatively with commercial paper and the others, except that we have seen its tendency toward much more violent fluctuation.² Conversely, of course, easy money and low interest rates stimulate bull campaigns and activities for the rise, and thus forecast advancing stock prices, just as they also stimulate business and forecast industrial recovery.

But the real technical signals of major reversals in the direction of stock market movement are to be found in exactly the same considerations as we studied in connection with individual stocks. And just as we found the most satisfactory way of observing and studying such technical formations with individual stocks

¹ See Chapter XI.

² See Chapter XIX, p. 468.

was through the medium of charts, so we shall find that charts of the general stock market are of prime importance in judging the technical position of the market as a whole and forecasting its future trend.

Applying the Seven Chart Formations to the General Market

If the reader will turn back to the close of the preceding chapter he will find a convenient résumé of the chart pictures which we found useful in interpreting the technical action of individual stocks. It is almost always a simple matter to recognize the period of the stock market cycle in which one finds himself, and it corresponds, of course, very closely to a stage of artificial pool manipulation. The depression stage is the accumulation phase. The period of revival is the marking up stage. Prosperity is the distribution stage and deflation is the marking down stage. Since we generally know what the current stage is, the cyclical theory will tell us what the next phase is to be. We need interest ourselves particularly, therefore, with the signals of reversal in the technical picture of the general stock market, since we have seen the signs of accumulation most often when a major trend is reversing from downward to upward, and the signs of distribution most often when a major movement was reversing from upward to downward.

Just as the index of the general market is a composite of many individual stock indexes, so we may recognize the same formations, on a larger and more important scale, in the general stock averages, as we have studied in the individual charts.

Let us turn our study to Plate 102, showing the Dow-Jones chart of industrial stock issues from the beginning of that compilation, in 1897, to recent date. The chart shows the monthly high and low range of the representative and leading stocks just as our individual stock charts show the daily range. The Dow-Jones chart also shows the daily average sales volume on the New York Stock Exchange for all groups of stock issues, including the railroads. This average volume is shown monthly but is the average daily volume for each month.

Thirty-Year Chart Analysis

We may go back to the beginning of the chart and find our old acquaintances, triangles, head and shoulders, double bottoms, complex tops and the whole troupe of pictures. Each lettered point on the chart represents a fairly well-defined example of major accumulation or distribution. If the reader has studied and remembered the description and examples of these formations in the preceding chapter he should find it easy to name each formation, before referring to the explanation given in the following page.

A-B-C. Ascending bottom, indicating the strong upward movement culminating at D.

D. Double top and broken trend line. (Through B, C and D.)

E. Double bottom. (Or a triangle followed by a false move.)

F. Head and shoulders top.

G-H. Common downward turn.

I. Double bottom and complex, or double, head and shoulders, bottom combined, followed by triangle, indicating exceptional strength and the rapid upward movement to J.

J. Triangular top and descending top.

K. Head and shoulders bottom.

L. Broadening top.

M-Ma-Mb-Mc. Quadruple bottom, which was not really broken on a basis of the old scale and signalled rapid advance to N. (See Appendix K.)

N. Head and shoulders top.

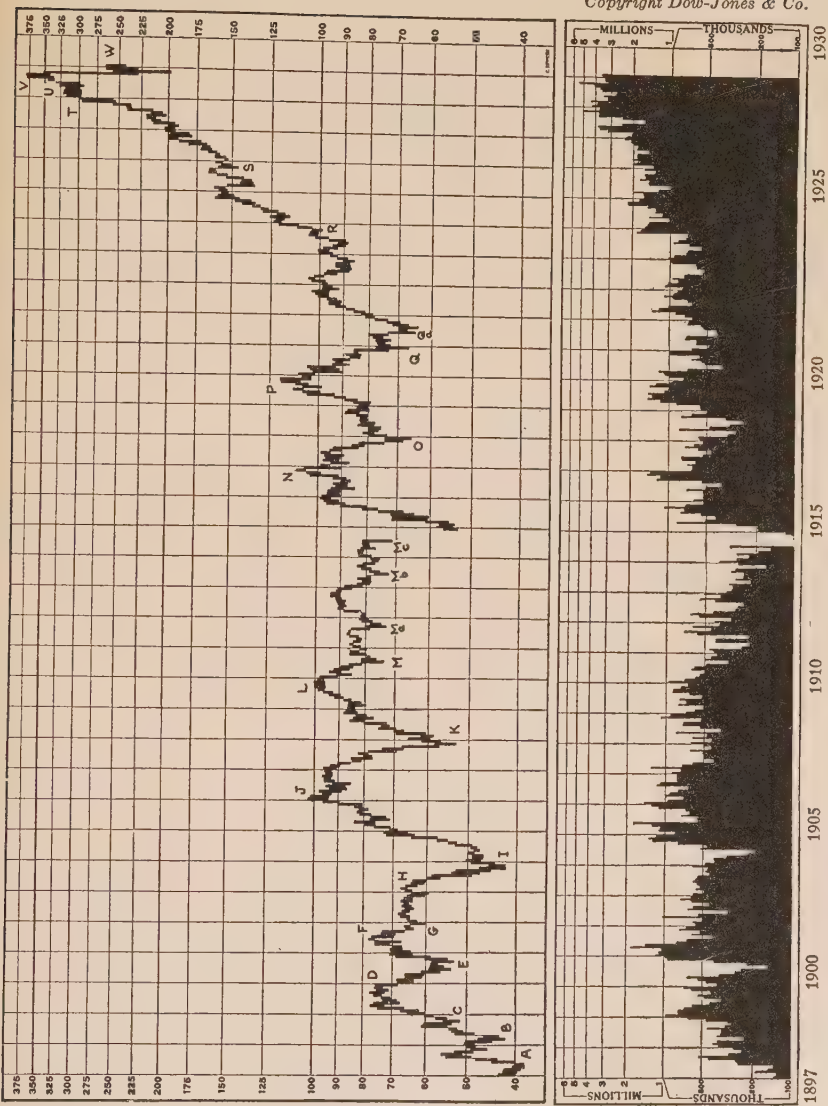
O. Imperfect head and shoulders bottom.

P. Complex Top.

Qa. False move after head and shoulders bottom at Q. Or triple bottom with Q and double bottom at Qa. Or ascending bottom following Qa.

R. Triangular bottom or intermediate triangle, indicating rapid continuation of the upward movement.

S. Ascending intermediate triangle, or ascending bottom. Also



a seven-time top or resistance level broken on the up-side, to indicate long advance.

T. Growing irregularity on high volume, or broadening top. See page 637. The true signal of the closing of the long bull movement.

U. The "exhaustion gap," showing the end of the advance.

V. False move into new high ground. Also a double top and complex top.

T-V. May be considered a broad, 10-month, head and shoulders top, with a long time (T) on the left shoulder, less time on the head, and only about two weeks on the right shoulder.

W. Head and shoulders bottom.

We see, therefore, that approximately the same important formations apply to pictures of the general market as we can use in analyzing the future course of individual stocks. This is basically true, because the general market averages are merely a composite of important stocks which go to make up the general "market," and also because all of these pictures which we have studied suggest the course of future movements, for they indicate either accumulation or distribution, aggressive buying or aggressive selling, whether they be found in one stock, a dozen or five hundred.

Time Element in the General Market

On the basis of this theory the longer it takes for any such picture to form, the longer is the process of accumulation or distribution, the greater the pent-up and potential power and the greater will be the resultant movement. The formations indicating major turns which we have just observed in the long-term chart of the general market became such major signals because they were comparatively long and strong formations. They do not appear much longer on the chart than did the similar formations in the individual charts, but it must be remembered that the latter showed a line range for each day of trading, while the chart on the general market shows a line range only for every

month. The time scale used in the general market chart is therefore over 25 times as small as the time scale in the individual daily charts.

The Daily Stock Chart from 1926 through 1929

When we examine the daily range chart of the general market, shown in Plate 103, from the fall of 1926 through 1929, we will not find so many such definite formations. They do not appear in such volume, because through that entire period, until the close of 1929, the general market was in a definite and major upward trend. At least we find no major formations indicating reversal, and through that entire period, to the summer of 1929, there are no indications that the major upward trend of the market had been reversed. There were a number of periods when pictures began to form which came very close to signalling a major reversal and led to considerable doubt of the continuation of the bull market, but none of them materialized completely until the fall of 1929, and most of them turned into a continuation signal, if anything, instead of a signal of trend reversal.

From January, 1925, through September, 1926, the chart shows the weekly range of the combined average of 50 stocks — 25 railroads and 25 industrials — as compiled by the *New York Times* and commonly called the *Annalist* average. From that date on the same average is used, with range being plotted daily instead of weekly and with the daily volume of all sales on the New York Stock Exchange included at the bottom of the chart.

The most important reaction in 1926 was that which began at A and extended to B in the first quarter of that year. The upward movement which culminated at A was signalled at its beginning by a typical head and shoulders bottom in April, 1925. At point A and preceding there are three broad head and shoulders tops but the best picture is given by the daily averages, on the last and third peak made by the general market at A. The formation does not show up so well in the weekly chart as it would in a daily chart. This indicates a comparatively short formation

and suggests that, although the subsequent decline would be severe, it would be merely an intermediate reaction in the major bull market.

Following the Moving Picture Day by Day

At point B we have a much clearer example of the head and shoulders bottom, followed by another violent advance culminating at C in another head and shoulders top, or possibly a common downward turning formation. As we move into the daily chart from this point on there are no definite formations indicating a major reversal and not very many intermediate, or continuation, formations. There is about a seven-time bottom at points D-E, which was a strong formation. Note the technical trend lines in the advance which follows. At point F there is a fair head and shoulders top, followed by the additional weak signal of a descending top.

From point G to H there appeared a formation which looked very much like a major reversal in the guise of a common downward turn, followed by a descending top. The stage was all set here for a major reversal and short sales were in order, with their usual stop protection, of course. By the time point I was reached, however, the trend had again reversed itself and saved the major bull movement.

At point J continuation of the upward course was quite definitely verified by the averages going through old highs into new high ground. Any short positions, assumed at point H, should have been covered at I and the position reversed to a long one at around point J. The loss from this incorrect expectation of a major reversal would then have been almost unappreciable compared with the profit realized from the ensuing continuation of the major advance to point K.

At point K we have the typical head and shoulders top formation, followed by a major reaction in the bull market, not a major reversal into a bear market. There follows a period of accumulation covering a period of about three months and showing one of the best instances in the daily general averages of a triangular



PLATE 103. DAILY STOCK INDEX CHART, 1925-6-30.

Showing the range of the Annalist average of 50 industrial and railroad stocks with volume of total sales reported on the N

Stock Exchange (See Chapter 26).

bottom, or continuation triangle, coming to its apex at point L, and followed by one of the swiftest upward movements of the major bull trend. Note also the intermediate downward trend line which was broken about two weeks before the point L, which added another strong indication of the ensuing upward movement.

The termination of this upward movement at point M gave no very definite signal of intermediate reversal so far as the price movement itself was concerned, but here we have an example of the importance of the volume chart. Note the increasing irregularity on high volume of transactions, indicating distribution in preparation for the abrupt decline which followed to point N. At the latter point we have an imperfect and short triangular bottom, followed by an ascending top, and also, at point N' by our strong intermediate, or continuation, picture of the ascending peak, promising continuation of the upward movement at a rapid pace.

Why the Bull Market Almost Ended in May, 1929

The ensuing six months of irregularity and extremely wide swings of the averages, from point O to point T, is another of the most interesting major formations in the entire chart. It looked very much as though a broadening top was being formed during this long period, to signal the major reversal of the long bull movement. The first reversal of direction came at point O, the second at P, the third at Q, the fourth at R, the fifth at S and the sixth at T. Our typical broadening top formation, if each reversal is broader than the last, cannot reverse more than five times. If the decline which began at point S, therefore, had gone below the previous low point at R, it would have completed the formation and signalled the major reversal into a bear market. Instead, however, the final decline was arrested before it got as low as point R. It reversed at point T and thus saved the technical indication for the bull cause.

This entire period was a particularly trying one for the chart student. It looked very much as though the broadening top were

going to materialize, and a short position was justified following the reversal at point S. Moreover, the reversal at point T did not become absolutely certain until the averages had advanced into new high ground once more at point U. There were other indications that the market was going to continue up instead of down but, purely from the chart standpoint, the short commitment in the general market would have brought a considerable loss if not covered before point U. If the position were reversed, however, at that point, as indicated that it should be, the subsequent profits would still have more than wiped out the previous losses on the short side of the market.

Gaps in the General Market

Naturally, the instances of gaps and such gaps covered are not so numerous in a chart of the general averages, which are a composite. There are still plenty of such examples, however, scattered throughout the entire chart. There are so many, in fact, that we shall not take time to note them. If the reader is sufficiently interested he may find them for himself, noting that in not a single instance did the gaps remain uncovered, until the "break-away" at point W' in October, 1929. A good exhaustion gap may be noted at point O.

One more point may be stressed from the technical chart angle, and that is our previous principle that, especially in a major bull movement, growing irregularity on high volume of transactions almost always indicates weakening technical position, distribution and at least a good-sized intermediate reaction to follow. Some of the best examples are the reactions following such irregularity on growing volume at points F, K, M, S and V. We have previously noted that about the best example appeared at point M. Compare the nervous, wide, irregular price-swings of the 11 days preceding beginning of the reaction, and their tremendous increase in volume of sales, with the preceding period of the "straight advance," or marking up period. Note also the usefulness of the steep upward intermediate trend line, which was broken a few days before the major intermediate reaction began.

The Stock Market Panic of 1929

And now we come to the most sensational climax of the most sensational bull market in American, if not world, history. Beginning toward the end of September, 1929, the general market began to weaken. By Wednesday, October 23d, prices were in full retreat and on Thursday, the 24th, the general market was demoralized by the avalanche of selling orders. On Tuesday, October 29th, with total volume of 16,410,000 shares, prices began a rather sharp recovery, only to give way once more early in November to renewed panic selling which carried quotations to the lowest official averages on Wednesday, November 13th.

With liquidation spent by its own fury, and with psychological oxygen from Washington, in the form of President Hoover's conferences and tax reduction; from the New York Stock Exchange, a questionnaire on short selling; from John D. Rockefeller (reputedly), an order to buy 1,000,000 shares of Standard Oil of New Jersey at a price slightly below the market; and from the Federal Reserve Board in the form of a lowered rediscount rate, the general market rallied sharply and the crisis was past.

Extent of the Declines

Inside of three weeks, the credited averages of important New York Stock Exchange issues had lost 50 per cent. of their market value. Losses ran near \$30,000,000,000 in valuation of securities on that Exchange alone,¹ and total paper declines for all securities, listed and unlisted, throughout the nation were probably well over \$100,000,000,000. This was the Stock Market Panic of 1929, the greatest wiping away of aggregate values on record.

The Fundamental Situation

What were the fundamentals? The author has tried to point them out throughout this entire work. The long bull market of

¹ See Plate 74 on page 475.

nearly eight years had carried prices up to new high records for all time, which were not justified by any form of logic. The stock market was just as inflated as any real estate boom, or any other type of boom. The public was buying stocks for speculation, asking neither their value, their earnings nor their dividend yields. Stocks were selling at 15 to 50 times their annual earnings against the basic ratio of only 10 times such earnings.¹ Dividend yields dwindled to less than one per cent. with no prospect of any great increase in near-future rates.

Business had been good for several years, interest rates had been low for several years, the market had been advancing for five years. What was the current place in the cycle? It was the crest. Still the old voices were raised in the familiar cry of a "New Era." The old rules were dead. There would be no more bear markets. Here and there some brave souls held out for the old theories. They were voices crying in a wilderness of bulls. The old theorists had been wrong for over a year, they were in disrepute, they feared to speak their mind. So the bull market went on.

Fundamentals Turn Unfavorable

Early in 1928 money rates began to advance rapidly.² By the close of the year they were genuinely high. The first signal. Next building began to retreat, and a business recession gradually and quietly got under way.³ Generally, the public knew that the situation was unhealthy, but each hoped to make another dollar and get out before the final day of reckoning.

No single factor may be ferreted out upon which to pin the debacle. In the last analysis, it was simply a foregone conclusion, but no one knew when the hour would strike and everyone hoped it would not be yet. From the fundamental angle, the first straw in the immediate wind seems to have been the advance in the rediscount rate of the Federal Reserve Bank of New York from five to six per cent. on August 8, 1929. The day following showed

¹ See Chapter XVII, p. 407.

² See Plate 101, opposite page 675.

³ See Plate 72 on page 463.

a terrific shock to the market, but it was bolstered up temporarily by strong-arm methods and went a little way into new high ground.

What Caused the Panic

The final straw, however, was almost unquestionably to be found, and with a bit of irony, on the other side of the Atlantic, in a corner which had suffered and grown bitter over the hardships inflicted upon it by the unreasoning and headstrong American bull market. Great Britain was unable to hold her gold in the face of the ridiculous call money rates which American speculators were willing to pay. She was forced to raise her rediscount rate from $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent. on September 26, 1929. Having used up all available domestic credit to put up stocks, America was drawing on foreign nations. Now the foreign nations were shutting down on that supply and the prospects turned to a strangled money market.

But it took still one more British factor actually to precipitate the American debacle. That was the Hatry failure in England. A huge chain of giant industrial and financial interests collapsed suddenly, bringing an acute financial strain upon British business men and investment houses. It was in some respects the greatest individual debacle in British history. Those losses meant the need for liquidating cash, and inside of 24 hours the New York stock markets began to feel the liquidation of British interests in American stocks.

How One Collapse Affects an Inflated Market

Whether it be a technical or a fundamental factor, there is no greater danger to an inflated stock market than forced liquidation of any kind. The collapse of one widely held stock, a single business or financial failure, quickly depresses any allied and inflated market. Here was a tremendous failure which Americans knew little about, but it spelled foreign liquidation — necessitous liqui-

dation, the kind that will not be denied — and it was the final spark that set off the powder magazine.

The American public knew its insecure stock market footing and was ready to jump. Suddenly it realized something was wrong. The gong had finally sounded. What more natural than that every one of the “new investors” should try to get out at the same time? The day of reckoning was at hand.

So it is easy to see why the Stock Market Panic of 1929 might have been foretold from a fundamental standpoint. The only question was one of time. When would the axe fall? Fundamentals had been weakening for nearly two years. The technical situation was the only one which could give the true answer as to date. Frankly, the author may admit that by far the greater portion of this volume was written before the 1929 Panic. Yet so certain was the end of the long bull market near by that the manuscript was written with that bull market in the past tense, and very little of the text needed alteration in the light of subsequent declines. What it was impossible to foretell from fundamentals was the extent of the decline and the time of its appearance.

The Technical Situation

So much for the fundamentals. What of the technical considerations? Even the technical analysis could not tell us all we would like to have known about the panic, but it did itself proud, nevertheless. It should have told us both the time of the decline and the extent of the decline. Let us look at the facts, by turning once more to Plate 103, showing the chart of daily averages.¹

From the very start of 1929 there were warnings of an end. We have previously noted the narrow range of the market averages from January through June, a period of six months during which volume held fairly high but the market got nowhere, indicating distribution. We have seen that that period showed a broadening top, in preparation for a tremendous decline, but that somehow, at the last minute, the day of reckoning was postponed.

¹ See Opposite Page 683.

But that long period of distribution is significant in the light of subsequent events, and it is well worth studying, in the daily chart as well as the longer-range charts. It was the first sign of an approaching end.

Technical Signals Forecasting a General Reaction

Again in July, 1929, at point U', we find further high irregularity after a rapid advance,¹ with fairly high volume — another sign of distribution, of weariness, in preparation for a major reversal. We have previously noted the shock which the market received after the advance in the New York bank rate on August 8th. We may note the gap in the daily average the next day at point U''. That gap should have been the "break-away" from the top formation, and it was only strong-arm methods (technically a "false start") which saved that day and brought new but short-lived strength back into the market.

New high ground — but not for long. At point V, in the daily average chart, comes another of those periods of growing irregularity on high volume after a sharp advance. Note the sharp thrusts into new high ground, which the market could not sustain — thrusts that were almost certainly eliminating a correct but slightly premature short interest.

Note the head and shoulders top around point V — not one, but a double head and shoulders top with a quadruple head, followed by the last dying gasp, the sharp run-up, the false move, following point V'. Then note the ragged falling off to a point below V', the feeble recovery on light volume to point W, to form merely another head and shoulders top formation, not only in itself, but also with point V as a left shoulder.

The Final Signal

Then, after all this preparation for the decline, note the final "break-away" gap at point W', the final signal that the downward movement had begun. And if further argument were

¹. See Chapter XXV, p. 637.

needed, it came on that fateful day when the last support level was broken, the level at 272 on the daily chart, a support level set up three times in July and August and twice more in October.

Nor is this mere theory and "looking backward." The author takes no credit for prophesying the Panic of 1929, but perusal of his published stock market forecasts which came out in September warned of an impending major reaction and advised liquidation of stocks in preparation for it.

Forecasting the Extent of the Panic

And now, what of the technical factors and the extent of the decline? Here again, the technical factors could not tell us all, but once more they did themselves proud, under the most hectic and demoralized conditions possible to postulate. How far would the debacle go? We have noted the first base of support, at 272. The next was that formed during the first six months of 1929, at around 230.¹ That support point did not faze the melting away of the averages, but it is significant that it *did* form the resistance level which stopped the subsequent recovery during the first couple of days in November.

The third strong support level at which the chart student might have forecast the end of the debacle was an exceptionally strong one. It was wide—from 170 to 190—and it was exceedingly long—from July, 1927, to August, 1928—13 months to form a support level. And we have learned that the longer it takes for any formation to complete its picture, the stronger is that picture and the more dependable that formation. No less than seven times in those 13 months had the general index dipped down to that support zone, been stopped, taken new life and recovered. The narrow range of five points, 177 to 182, from points G to H, is almost one continuous series of support points, extending from November, 1927, to February, 1928,—four months with perhaps 100 trading days.

¹ See Page 683.

The Final Support Level Holds

This third and strongest support level was the final barrier which stopped the Panic of 1929. It did not stop it dead — the decline went six points through it, so great was the impetus. But to all technical intents and purposes, the support level held where it should properly have been expected to hold.

On Monday, October 28th, after the market had closed well below the second support level, one of the author's best layman friends 'phoned him and asked an opinion. Everything was demoralized, nerves were strained, 'phones had been ringing from early morning, no one wanted to give opinions — no one *could* give them.

The author hesitated to tell the "public" all that he feared. He was by no means certain in his own mind. But the next firm support level was 170, and the technical analysis was the only straw left of material aid. The author's friend was told that while it seemed rather ridiculous, almost impossible, with the averages then at 225, the technical indications held out no hope until the average of 50 stocks had dropped back another 55 points, to around 170.

The average went lower, recovered to 235, and then, around the middle of November, dropped back once more — under panic conditions — to an extreme low point of 164 and then rallied. The author takes no credit. The incident is related merely to show that technical study of the stock market is not humbug, is not a useless chimera, but that it does have tremendous practical value, especially when all other factors of market analysis have failed.

Lessons of the 1929 Panic

That is one of the lessons of the Stock Market Panic of 1929. There are many others, and they include the lessons which we have been trying to impress upon the reader throughout this volume. The stock market never goes up forever, neither does it decline forever. It still moves in some form of cyclical path,

whether those cycles be regular or indefinite. We are always in a "new era" and yet we are never in a new era. Times, aspects, situations, the outer trappings are constantly changing. But the ultimate laws of action and reaction, the fundamentals, the technical factors, based upon immutable law, do not change.

With such a tremendous melting away of values, it would be idle to argue that the public was not injured, that purchasing power was not impaired, by the Panic of 1929. Just as stocks went too high in previous bull markets, so they may go too low in bear markets. Just as they discount increasing profits by selling more than 10 times current earnings in some eras, so they may discount lower profits by selling for less than 10 times current earnings in other periods. But the long-swing fundamentals, the true bases of valuation, are still valid, and the market student who is willing to be guided by such factors, who is willing to be patient and wait for fundamentals eventually to assert themselves, need have no fear of the future, either for the industry of his nation or for the course of stock market prices.

The Future

There are considerations which set the situation following the Panic of 1929 in a class by itself, so far as special factors are concerned. It is well to remember that the nation has often been in much worse straits than at the beginning of 1930, that inflation in stocks is the easiest and quickest form of inflation to cure, and that while previous panics have been followed by desultory trade and long periods of readjustment, the old rule holds that the stock market never moves forever in one direction.

CHAPTER XXVII

CONCLUSION AND REVIEW

Co-ordinating the Material

We are now in a position to review our previous detailed studies and draw from them a broad and general idea of the most important factors which may help us correctly to gauge our practical stock market operations. In the broadest sense, the short-term trader should be able to deduce when, where and how to reap his profits from short-term movements, while the more sedate long-swing investor should be in a better position to judge the circumstances which advise gradual shifting of his long-swing position. Both types of market operator should be able better to recognize the circumstances which indicate the end of major bull markets and the end of major bear markets, from the standpoint of fundamentals and from the angle of purely technical considerations.

First, from the theory of cycles we may know what period of business, money and stock market cycle we are currently in, and can therefore be on the lookout for the turn which is to signal the passing from the present stage into the next one called for in the regular sequence of cyclical events. In the major bull market we generally have easy money, good business and a fairly regular upward trend for general stock market averages. First comes the turn in fundamentals. Interest rates move upward, slowly but surely. High business prosperity continues for perhaps a year or so thereafter, but the chief fundamentals have turned unfavorable, and eventually (in the past) business has gradually become more spotty, irregular and finally has begun its decline.

The bull market is often accompanied by rapidly rising commodity prices and advancing wages. The faster these advance, the more unstable the picture becomes and the nearer appears the

eventual break. Commodity prices usually break first and wages are comparatively slow in their downward course, the stock market almost always reversing first.

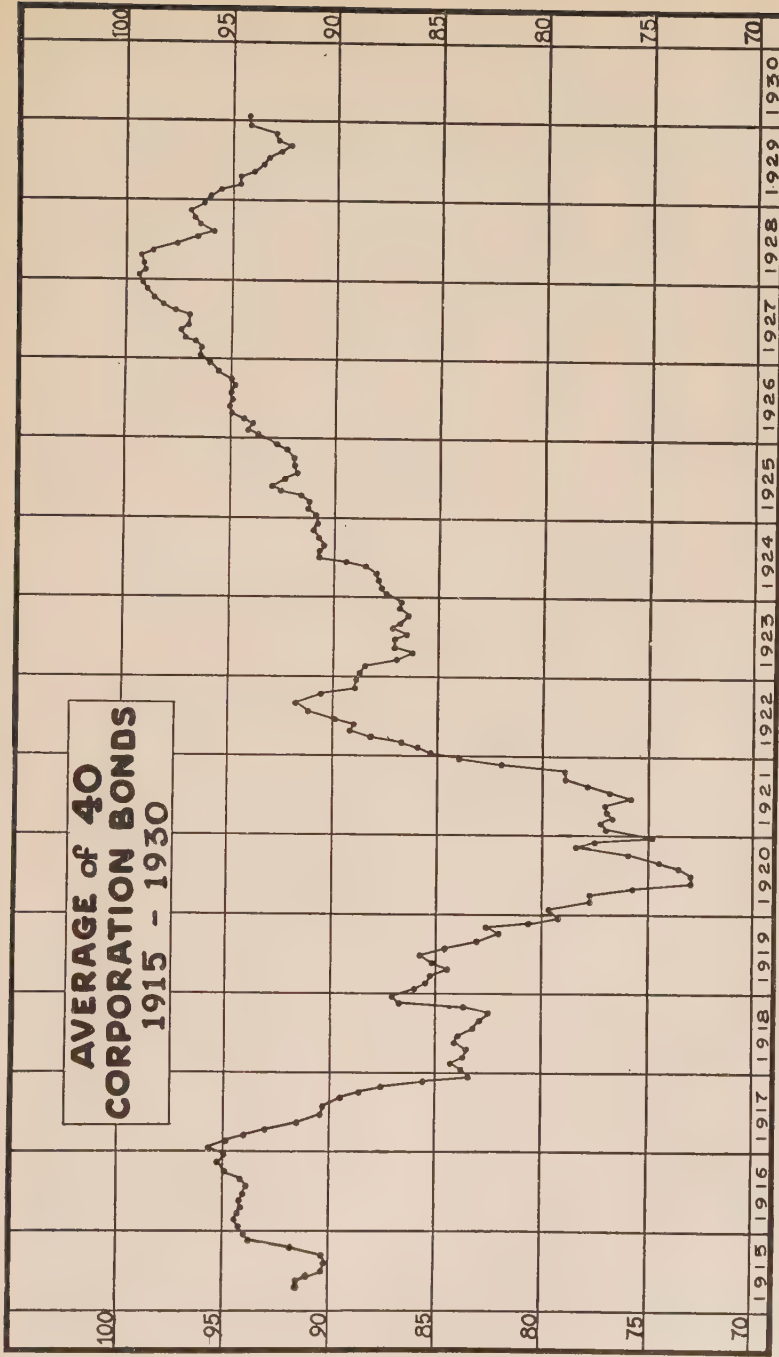
Bond Prices as a Stock Index

The reversal of bond prices almost always precedes the reversal of stock prices, and while this is largely the result of a reversing credit situation, it is none the less a fairly reliable index. The Dow-Jones monthly index of 40 corporation bond prices is shown in Plate 104. It is significant that bond prices turned down early in 1928, more than 12 months before the stock market collapse, but this lag is generally nearer six or eight months and was not so reliable in point of time during the 1928-29 turn of the cycle.

From a technical standpoint, the action of the market itself gives us such clues as we have already studied, their detection made much easier by the use of charts. We know the various chart formations which indicate major accumulation or distribution and suggest reversal of the major movement. Just as growing irregularity and growing volume of transactions indicate at least intermediate reaction, so growing enthusiasm, growing excitement, growing spectacular advances and growth of total transactions, indicate that the major reversal may be near at hand.

Characteristics of the End of a Bull Market

After fundamentals have turned unfavorable the technical strength of the market often carries it on up for a much longer period of time and for much wider gains, and only the technical considerations give much clue, in the final analysis, to the time when the market will actually turn. Excitement is one of the strongest evidences of weakening technical position in such a period. Volume of sales mounts to huge figures, tremendous advances take place in individual and speculative favorites, perhaps sudden collapses of other stocks occur at the same time, interest rates are high and call money soars nervously to abnormal



Copyright Dow-Jones & Co.

PLATE 104. DOW-JONES BOND AVERAGE 1915-30

It is interesting to compare such a chart with the Dow-Jones stock index in Plate 102 on page 679, and note how rising interest rates and declining bond prices often forecast stock market declines.

heights. Traders begin to get nervous themselves and warnings appear in the newspapers.

But public enthusiasm and the gambling spirit are aroused. People no longer trade for investment, for yield, for fundamental values, or even for small profits. They buy stocks because they think they are going up rapidly and without regard to asset worth or dividends, earnings, true prospects or dividend yield. Tips and rumors run wild. This stock is going to 500. That one is going up 50 points next week, etc. The stock market "makes the front page" of the newspapers. Everyone is talking stocks. Everyone is in the market or wants to be. And all such circumstances are the most dangerous of symptoms and the very best reasons why the average trader or investor should be selling his stocks rather than buying more. Such circumstances make up the usual picture of the closing days of a long bull market.

Beginnings of a Bear Market

When the distribution period is over at the close of any bull market and the major movement has turned downward into the marking down stage or a major bear movement, the tendencies which we have noted in our description of the end of a bull market grow gradually but steadily less potent and less noticeable, finally giving way to just the opposite tendencies, which again go too far the other way at the end of a long bear market.

In the early stages of the bear market, for instance, interest rates are generally still very high, quite often higher than before the bear movement started; business is still satisfactory, or even apparently booming, in individual lines; tips and rumors of a favorable nature are still going around, with frequent sharp recoveries, all perhaps designed to keep the public from becoming discouraged too soon and selling out at comparatively high prices.

As the major bear movement continues interest rates decline, business is poor, commodity prices are often exceptionally low, public confidence is gradually being undermined, earning statements are declining, public interest in the market has dropped away rapidly (at least so far as constructive purchases are con-

cerned), brokers' loans are being reduced, favorable tips and rumors gradually diminish and give way to growing unfavorable ones. Gradually the basic fundamentals are being restored to a more favorable basis, but the public, as usual, sees only the terrific declines, the staggering losses, the growing blackness of the future outlook, just as it saw only the bright side of things while the fundamentals were weakening.

Characteristics of the End of a Bear Market

Finally, what is the picture at the end of the long bear market? Interest rates have been easy for some time, perhaps a year or more, commodity prices are low, wages are far below their previous highs, public buying of all kinds is at low ebb, corporations are trying to liquidate costly inventories and loans, their earnings are poor, even the strongest of companies perhaps showing huge deficits. Dividends are being reduced, failures are on the upgrade, stock prices have dropped for so long that there seems no end.

Now the market "makes the front page" because of its declines instead of its advances. Now the tips and rumors are all on the unfavorable side. This stock is going to have to cut its dividend or pass it. That stock is still too high and is going to drop another 25 points in the next few weeks. This company is on the verge of a receivership and is going bankrupt; that brokerage house is on the ragged edge and likely to join the numerous previous brokerage failures which have already occurred. Even the Twelfth Village Bank is whispered to be in sore difficulties and likely to go under. The country has suffered a death blow. Prosperity may come back some day but it will be a long, hard pull and there is no telling how much further down stocks are going before the turn comes.

What is the result? Just what the insiders are working for. Public confidence is demoralized. The average investor is tied up with his heavy load of stocks accumulated in those rosy days, now seemingly gone forever, when stocks were selling even further above their true asset worth than they are now selling be-

low that worth. The professional speculator, the trader, the wise long-swing investor, all have sold their stocks, though perhaps at huge losses, long ago.

Dangers for the Long-Pull Investor

Now comes the danger for the long-pull investor. Yes, he bought with the idea that nothing could induce him to sell. He was going to hold for long-pull appreciation and pay no attention to intermediate reactions. But now — why, the country is going to the dogs, the stocks that looked so good a year or two ago now look weak enough for receivership. Selling would mean a tremendous loss, but maybe if he sells now he can recoup some of his losses by buying his stocks back later at still lower prices, after things have cleared up a bit.

This is the tragedy of the long-pull investor. It is no exaggeration to say that the greatest amount of public selling is done in such a situation, just when stocks ought to be bought instead of sold, just when inside accumulation is about completed, when the long bear market is about ready to reverse itself into a bull movement. The public usually sells at this seemingly darkest moment, when stocks should be bought for the long-swing, just as it usually buys at the seemingly brightest moment, when long-swing stock holdings ought to be sold.

These pictures may give the reader a rather skeptical outlook on all stock market operations. What they are designed to do is to give him a skeptical attitude toward stock market gossip, publicity and psychology. And if the reader learns from such pictures to discount all he hears as gossip and to base his market activities upon study, experience and fundamental reasoning, then this work will not have been in vain.

Why the Public Loses

The public generally loses. It loses because it listens to such frothings of gossip, rumor and tip, instead of digging into the actual facts and the fundamentals for itself, spending some per-

sonal time for study and analysis, and basing its operations in the market on such fundamentals, with courage, foresight and patience. From a logical standpoint, how are the professionals, the students, the authorities, the pools going to accumulate stock to cover their short commitments made in the previous distribution period, long ago and at higher prices? How are they going to accumulate additional stock for the next major bull market, if they cannot discourage the public to sell their basically sound stocks at the bottom of the bear market?

The situation is just the reverse of the end of the long bull market. How can the insiders and pools distribute their stocks and sell short for the ensuing decline at fantastically high prices if they cannot get the public to buy those stocks from them near the top of the long bull market?

Being Right Too Soon

The fundamentals and the technicalities all work slowly in such a cycle as we have pictured. One of the most common discouragements of the wise investor, who can see all these things, is that he may be "right too soon." He buys too soon and gets discouraged. Or he sells too soon and resells at the wrong time. Or he sells too soon, gets discouraged by continuation of the advance, and repurchases at the wrong time.

We have seen that there are no 100 per cent. rules for naming the day when the major movement reverses itself. Our entire discussion of fundamentals and technical factors has been designed to help the trader and the investor to decide the approximate times to buy and sell. He can never hope to hit it exactly. But if he follows the cyclical theory with a logical and reasoning mind, with study and experience and, above all, with patience and the courage of his convictions, so long as he is not proven conclusively to be wrong in those convictions, there is no reason why the average stock market operator should not make very satisfactory profits over the long-swing and the long-pull, as well as for the short-term and the short-swing.

One reason why even the sound operator is often right too

soon is because he fails to take cognizance of the tremendous power of psychology in the market. We have previously seen that power in our pictures of the end of long bull and bear markets. It is one of the most difficult factors to judge in all stock market trading, for it is practically immeasurable. From the standpoint of comparative degree, however, public psychology, when aroused, is almost certain to be mob psychology and to go too far. Public psychology may therefore be counted upon to carry any major movement far beyond the limits of its logical extent.

A corollary of this theory is that the public never expects any major movement to come to an end until long after it actually does end. Public psychology is perfectly blind as regards fundamentals and basic reasoning. At the top of a bull market the public knows that prices are too high, that fundamentals are unfavorable. It ignores such knowledge just as it does the same at the bottom of a bear market, when it knows that fundamentals are as bad as they can get and prices are already far too low. The usual excuse for such neglect of logical conclusions is that of "a new era."

The "New Era" Credo

For at least a year or two previous to the close of 1929 the cry from the house-tops was this familiar one that "we are in a new era." The laws of cycles, the laws of action and reaction, the basic fundamentals no longer applied because of the New Era — the golden age of American progress. Such statements are misleading because they are always at least partly true. Every period of business expansion or business depression is a new era. Times change and the world moves on. The recent period of prosperity, with the greatest bull market ever recorded in American history, was based upon many factors of a new era. But all the powers of science, of invention, of cost-cutting and labor-saving, of efficient management, co-operation and combination can hardly be expected to overrule the basic laws of supply and demand, of cyclical movements based on excess, and the

fundamental theory that inflation in any line does not last forever.

The cry of a "New Era" is heard at the bottom of bear markets as well as the top of bull movements. In the former case it takes the form of argument that the "golden days are gone forever," that the nation's prosperity has passed its peak and that the cream is off of everything. The recent bull market was said to have resulted from a new American era due to our establishment as a creditor nation. The fact unquestionably had merit and served to prolong the bull market, but it did not mean that inflation could be continued indefinitely.

The United States was compared with Great Britain in her early flush of world leadership, but few of those who made the comparison took the time to study the past history of stock movements of that great nation. Unfortunately, the records are not very clear or continuous, but there is sufficient information to show that England went through numerous periods of inflation, based upon the same old cry in those days, of a "New Era" in British industry and world leadership.

The "New Era" in 18th Century England

The chart in Plate 105 shows the general trend of the nation's leading stock in bull and bear markets for a period of more than 230 years, and the old laws of cyclical tendency, of action and reaction, are almost as clear as they are in our own stock market history.

In 1720 came the first decided period of inflation, which culminated in the South Sea Bubble. In 1815 came another peak and around the beginning of the 20th century still another. In between these tremendous upward movements of stock inflation there appear minor periods of bull and bear markets — smooth, regular, normal, cyclical — which may be considered to approximate our own general stock fluctuations in normal markets, previous to the super-normal stock inflation period of recent years.

The conclusion need not be drawn that American stock prices will suffer the extreme rigors of deflation similar to the super-

normal periods of British stock market history, but the chart is none the less interesting and instructive. In Appendix L will also be found a splendid description of the South Sea Bubble affair as noted by British historians of the time. The reader will perhaps find some references in that inflation of 200 years ago which he previously thought were much newer and more modern than that.

False Starts in Major Reversals

Another corollary of public psychology and excess in the closing days of long bull and bear markets is the possibility of "false starts," false moves or shake-outs in the general market. Broadly speaking, the bull market ends with terrifically high volume while the bear market ends generally with very low volume and little trading interest. After accumulation or distribution have been largely completed, the stage set and the market ready to start its reversal, such false moves often intrude themselves, seemingly for the express purpose of throwing the logical analyst off his track.

The tendency of public psychology, we have seen, is to believe always in indefinite continuation of the major movement which is approaching its close. The action of the market, especially as a bull market grows near its end, is conducive to such public credence. At the close of a bull market we have seen that there is often growing nervousness and irregularity on high volume. The market breaks, recovers to a new high, breaks and recovers. The stage set for reversal into a bear market, the studious operator thinks each break is the true reversal. The public merely grows more certain of its long position. It worries over the first few reactions but finally buys more stock on each such reaction because "it has always come back before."

Likewise, at the end of a long bear market we have false moves for somewhat the same reason, the encouraging of public sentiment that the major movement is going to continue indefinitely instead of reversing itself. After a long decline, when the stage is all set for reversal and the market has perhaps already started

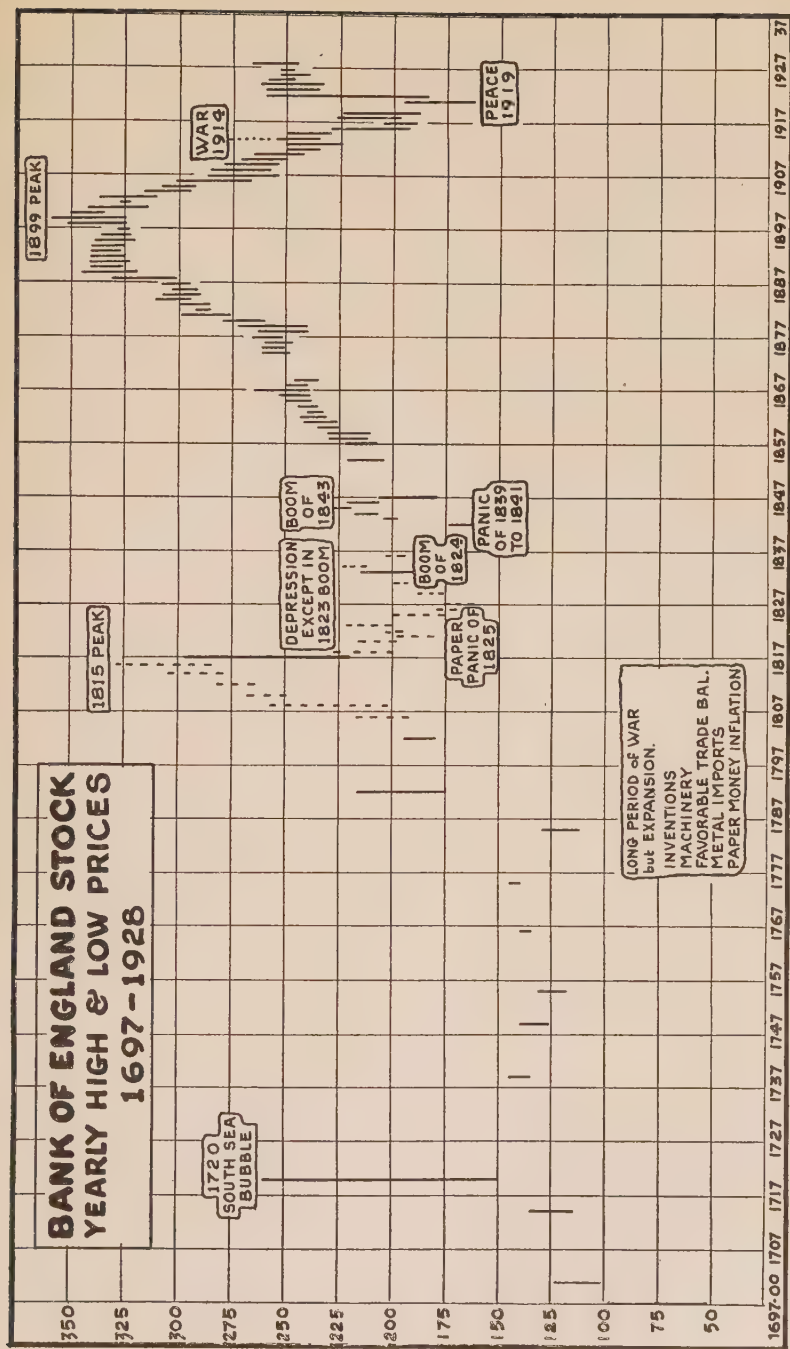


PLATE 105. CHART ON BANK OF ENGLAND STOCK 1697-1928

Showing an approximate index of British stock prices for 230 years and what happened after "New Eras" in British financial history.

up, there will suddenly develop a new reaction which carries prices down into new low ground.

Getting the Public "Used" to False Market Action

The student is bewildered by such false moves and often misled, but he is not so likely to be misled, if he has the courage of his convictions, as is the public. It has grown used to continuous new low levels for stock prices. When the recoveries first begin to materialize it takes heart and decides to hold on to what stock it has left. But each recovery is followed by a slump into new low ground. It becomes accustomed to this operation and finally it decides to sell out the remainder of its stocks on the next bulge, likewise thinking that the next reaction will always carry prices lower since they "have always gone back down again before."

Such false moves, or shake-outs, are also engineered, of course, with an eye to discouraging a canny but slightly premature long or short position, by operators who are not sure enough of their position, even though it be a correct one, to hold such position without the employment of stop-loss orders.

Notable examples of such false moves, or shake-outs, may be seen in the Dow-Jones chart in Plate 102 on page 679. In August of 1919 the stage was all set for reversal into a bear market. But prices recovered smartly, after an intermediate movement in the correct and major direction, and staged a final false move into new high ground at point P. The bull market did not finally reverse into a bear movement until November of that year.

Again, in 1921, the stage was set for reversal of the long bear market into an advancing one. From the low points of December, 1920, stocks recovered confidently for the first five months of 1921. To all appearances the reversal had come and the new bull market had begun. But then came a sudden reversal or false move, and by June, 1921, the averages were again in new low ground. The indicated bull market did not truly get under way until August of that year.

Defense Against the False Start

The defense against such false moves in the major market depends upon the type of trading. The short-swing trader will protect himself by close stop-loss orders, can often get a clue from the technical, or chart, position, and can re-establish his position at the end of the move. Such false moves are much more dangerous for the long-swing operator since he does not normally use stop-loss orders. His defense lies chiefly in never completing accumulation or distribution all at once in preparing for a campaign. If he is buying near the bottom of a bear market for the long swing, he should buy on a scale down — perhaps 10 per cent. of his anticipated line now, another 10 per cent. every three, four, five, or even 10 points, down. If he is selling out his long-swing commitments toward the apparent close of a bull market he should sell on a scale up — say 10 per cent. of his entire potential supply of stock (including any planned short position) at the current market, and perhaps an additional 10 per cent. every 10, 20 or even 50 points up.

Scale Buying as Protection for Long-Swing Campaigns

This principle of gradual or installment accumulation and distribution for long-swing campaigns is such an important one from a practical operating standpoint that the author would almost subscribe to a rule that, under such conditions, the hypothetical total of personal accumulation or distribution should never be entirely completed. The notion is especially valuable in distribution on a rising market, since rising markets have no theoretical end, whereas declining markets cannot go below zero, and accumulation may, therefore, be completed entirely at that theoretical level, or above it, without any grave danger.

Such a theorem, that distribution or accumulation should never be entirely completed, might perhaps be difficult of practical achievement on an automatic scale basis, if the campaign were started too soon. The ideal could be approached, however, on an automatic basis, if each successive purchase on a scale down, or

sale on a scale up, were reduced in amount, either arithmetically or on a percentage basis, from the previous trade.

In short selling, of course, it is still advisable to use the stop-loss order for protection, whether the commitment be for speculative trading or for long-swing operation.

“ Selling Against the Box ”

Technically, some differentiation must be noted between actual short selling, which places the operator short of stocks, and short selling against a long position. The latter method is called “ selling against the box.” It arises from the fact that the long-swing operator may have his securities outright and tucked securely away in his safe deposit box and may leave them there all the while he is actually selling them in preparation for a long-swing reaction.

The long-swing operator may consider, for instance, that it is time to sell his stocks, but he wishes to buy them back again at an early date, when his anticipated market decline has materialized. He may not wish, therefore, to go to all the trouble of getting the securities out of his deposit box, delivering them to his broker for sale, having them transferred into someone else’s name, and then, after perhaps a few months, having to transfer the same stocks back into his own name, once more receive them from his broker and replace them in his safety vault.

Liquidating Without Disturbing Actual Stock Certificates

He may avoid this routine merely by selling short an equal amount of the same stock issues which are in his vault and which he wishes to sell out. He does not touch those securities themselves. His broker borrows equal amounts of those issues, according to his short position, and when he covers he goes back to his original position once more, without ever actually touching the securities which repose in his safe deposit box at the bank.

From the broker’s standpoint he is short of the stocks he sells “ against the box.” From the operator’s standpoint, however, he

is not short unless he sells more than he has in his vault. He is not actually short because he could make good the delivery of his short stock at any time he wished, merely by going to his safe deposit box and taking out the securities there reposing. Indeed, if he changes his mind after he has sold short, and decides not to cover or that he does not care to hold the stock, he need not actually cover or buy back his short stock in the open market, because he already has the stock necessary for covering in his own possession.

An Example

The crux of the whole matter lies in seeing not the single transaction of selling short, but the entire position, or inventory, of the operator. If he is holding 1,000 shares of Steel in his box and sells 1,000 shares of Steel short, then he actually owns no Steel. If he sells only 500 shares, then he is not truly short that 500 shares; he is still actually long 500 shares. And if he originally sold 1,000 shares short, and later covers that short sale, then he has not merely evened up his original short sale, but he is once more long the 1,000 shares of Steel which he has in his safe deposit vault, just as he was before his original short sale.

"Selling against the box," therefore, is nothing but short selling of a temporary nature, to achieve the same result, without effort, as if the operator had opened his vault and taken out his long stock. Short sales against the box may be protected by stop-loss orders, of course, just as regular short sales.

The Final Review

Finally, then, what have we learned from our study of the stock market, its theory and its practice? If the author's aims in writing this volume have been attained, we have learned first that there is no perfect highroad to absolute and certain profit in the stock market. Approaching the subject in the proper attitude of humility and the desire to learn, therefore, we have seen the basic stuff of which stocks are made. We have studied the physical

machinery of Wall Street and the stock exchange. We have become familiar with the instruments which constitute the stock operator's necessary tools.

We have studied the various rules which apply most often and most successfully to stock market trading. We have seen that the two main divisions whose considerations affect stock market analysis and operation are the fundamental and the technical positions, in the general market as well as in individual stocks. Our study has taught us that the factors in both of these categories are important to both the short-term and long-term operator. We have delved into the technical theories and factors which assist chiefly the short-swing speculator or trader, and again into the fundamentals which are the chief concern of the long-swing investor.

We have studied the important effects of public and market psychology, both for the fundamental and the technical operator. We have studied the characteristics which generally prophesy in advance the minor as well as the major reversals and turns in the course of market price trends. We have seen that even with all these rules and theories and suggestions the analysis cannot always be correct, and we have studied various means of protecting the individual from too great risk, too great responsibility and too great loss, that his stock market operations may not, in themselves, interfere with the normal functioning of his reason, his experience and his judgment.

Perhaps the reader has been discouraged by the frank admission that after he has learned all these rules he must also realize that they cannot be depended upon in every case and that all of them have their exceptions. The author has tried to show that these exceptions are comparatively rare and that by combining practical and theoretical knowledge the few necessary false moves of the individual trader may generally be turned into eventual profit, by prompt and courageous action when the previous position has been shown to be incorrect.

Through the entire volume, especially in the passages referring to practical and theoretical operation in the market, the author has preferred to err on the side of conservatism, toward dissillu-

sionment rather than over-enthusiasm and zealous encouragement. For the individual who is easily discouraged is not the perfect type for stock market operation. The reader may take heart, however, for if he has read this volume through thoroughly, thoughtfully, studiously and conscientiously, it is an encouraging testimonial of his interest in the stock market, his desire to learn and his will to succeed, in spite of discouragements and disillusionment.

Conclusion

And if he will continue his study with conscientious zeal, if he will use the contents of this and other volumes ¹ as a basis for sound knowledge based upon the experience of actual stock market operation, if he will plan his market operations with care, with time, with study and with sincere analysis, considering not one theory and not one rule but all of them in relative value, if he will protect himself against demoralizing loss and needless worry and, once having arrived at a logical conclusion based upon all these factors, will pursue his course with courage and without regard to minor factors of doubt, so long as his original analysis is not proven false — in short, so long as he plays courageously fair with his sincere study — there seems no reason why the average student should not reap the rewards of successful stock market operation, be it over the long or the short term.

And the rewards of stock market success are among the most satisfactory and the most valuable that may be hoped for, either as a direct business or as a part-time hobby. For those rewards consist not only in financial remuneration but extend far deeper into the personal satisfaction that comes from having expended time, study and individual effort in the mastery of a difficult and intricate science.

¹ See Bibliography, page 834.

APPENDIXES

NOTE

The information herein contained has been carefully compiled from authoritative sources and official records and is believed to be correct, but it is not guaranteed by either author or publisher.

APPENDIX A

CHRONOLOGY OF NEW YORK STOCK EXCHANGE

New York Stock Exchange Year Book — 1928-1929

- May 17, 1792 Twenty-four brokers subscribed to the original brokers' agreement. This was the first organized stock market in New York. Met under buttonwood tree at what is now 68 Wall Street.
- Mar. 8, 1817 Adopted a Constitution and the name of "New York Stock and Exchange Board."
- Apr. 8, 1817 Moved indoors, renting a second floor room at 40 Wall Street. (They subsequently moved some ten or twelve times before locating on their present site at the corner of Broad and Wall Streets.)
- 1830 First railroad stock, "Mohawk and Hudson," was placed on list.
- Mar. 16, 1830 Dullest day in history of Stock Exchange. Thirty-one shares of stock were traded in; 26 shares of United States Bank at 119 and 5 shares of Morris Canal and Banking Co. at 75¼. (From *The New York Stock Exchange*, by E. Clarence Stedman.)
- Feb. 1, 1832 Buying in for non-delivery authorized.
- Dec. 16, 1835 Fire destroyed 648 buildings in New York, including the Merchants Exchange building where the sessions of the Board were being held at that time.
- Jan. 29, 1863 Title of exchange was changed from "New York Stock and Exchange Board" to "New York Stock Exchange."
- Jan. 30, 1863 New York Stock Exchange Building Company was organized.
- Oct. 6, 1863 New York Stock Exchange Building Co. bought its first property at 13 Wall Street, and 4 New Street.
- Dec. 9, 1865 New York Stock Exchange moved into the first building of its own at 10 and 12 Broad Street. (This is part of the present site of the Exchange.)
- 1866 Inauguration of arbitrage. Opening of Atlantic Cable.
- Nov. 15, 1867 Stock tickers were first introduced.
- Oct. 23, 1868 Memberships were made salable.
- Feb. 1, 1869 Exchange required registering of securities by listed companies to prevent their over-issuance.
- May 1, 1869 Government of Exchange was vested in Governing Committee of 28 members. The membership of the Exchange at this time was 533.

Government Bond Department members were offered full privileges of membership in the New York Stock Exchange on the payment of \$1,000 each.

May 8, 1869 The New York Stock Exchange and the Open Board of Brokers adopted a plan of consolidation. The Governing Committee was increased to forty members.

By the foregoing changes the membership of the New York Stock Exchange was increased to 1,060, composed as follows:

New York Stock Exchange	533
Government Bond Dept.	173
Open Board of Brokers	354
	1,060

Sept. 24, 1869 Gold speculation resulted in "Black Friday."

Sept. 1871 Continuous market in stocks established. Previously there had been "calls" in the morning and afternoon with an intermittent market in the "Long Room." The "calls" in stocks were officially abolished in October, 1882. The bond "calls" were abolished in March, 1902.

May 22, 1872 Stock Exchange purchased all outstanding stock of the Building Co.

Apr. 3, 1873 "Gratuity Fund," system was adopted for the payment of \$10,000 to the family of a deceased member of the Exchange.

Sept. 18, 1873 Stock Exchange closed at noon because of failure of Jay Cooke & Co., promoters of Northern Pacific Railroad. Many failures were imminent.

Sept. 30, 1873 Stock Exchange reopened. Between September 18 and the end of the year, there were 57 Stock Exchange failures, besides the closing of the Union Trust Co., the Bank of the Commonwealth and other financial institutions.

Dec. 1, 1873 Present hours of 10 A.M. to 3 P.M. were established.

Nov. 13, 1878 First telephones were introduced in the Exchange.

Oct. 22, 1879 Exchange bought the adjoining property south of the Exchange, 24 feet on Broad Street and 68 feet on New Street.

Nov. 12, 1879 Forty new memberships were authorized to be sold to pay for the enlargement of the Building, bringing the total membership of the Exchange to the recent figure of 1,100.

Jan. 29, 1881 Electric annunciator board installed for "paging" of members.

Oct. 1, 1881 Enlargement of Exchange building was completed.

May 6, 1884 Failure of Grant and Ward, Marine Bank and the Metropolitan Bank, resulted in 15 Stock Exchange failures.

Mar. 25, 1885 Department of Unlisted Securities was established.

Dec. 15, 1886 First day on which sales of stocks totalled more than 1,000,000 shares. (*N. Y. Times* figures 1,095,159 shares.)

- May 17, 1892 Organization of Stock Clearing House, on the 100th anniversary of the signing of the original brokers' agreement.
- Apr. 30, 1901 Exchange took up temporary quarters in Produce Exchange while new building was under construction.
- May 9, 1901 Northern Pacific panic.
- Apr. 23, 1903 New Building (18 Broad Street) opened.
- Oct. 23, 1907 Call Money loaned as high as 125%, following the suspension of payments by the Knickerbocker Trust Company on the previous day. This period is generally known as the panic of 1907 and was accompanied by numerous suspensions of payments by banks. The Clearing House later issued "Clearing House Certificates" to ease the money market.
- Mar. 31, 1910 Unlisted Securities Department abolished.
- July 31, 1914 Exchange closed due to pending outbreak of World War.
- Nov. 28, 1914 Exchange reopened for bonds under restrictions.
- Dec. 12, 1914 Exchange reopened for stocks under restrictions.
- Apr. 1, 1915 All restrictions removed.
- Nov. 29, 1918 Building Co. bought Mortimer Building at corner of Wall and New Streets.
- Jan. 2, 1919 Separate ticker system for bond quotations was installed.
- Jan. 1, 1920 Building Co. leased the Wilkes Building at corner of Wall and Broad Streets for 21 years with three renewal privileges.
- Apr. 26, 1920 Establishment of Stock Clearing Corporation and first day's settlement through the Day Branch.
- Sept. 16, 1920 Wall Street explosion. Thirty killed and over 100 injured.
- Mar. 22, 1921 Stock Clearing Corporation began clearance of loans for members.
- Apr. 26, 1922 "Questionnaire" for regular examination of member firms' financial condition inaugurated.
- June 6, 1922 Better Business Bureau of New York established for fighting financial frauds.
- Oct. 2, 1922 Addition to Stock Exchange (11 Wall Street) opened.
- Apr. 25, 1923 System of assignable stock transfer receipts by the Stock Clearing Corporation was inaugurated facilitating use of securities in transfer as collateral for loans.
- Oct. 30, 1924 Sliding scale of commission rates adopted.
- Feb. 5, 1925 Special Code of listing requirements for Foreign Government bonds was announced.
- June 25, 1925 Revised Constitution effective.
- Jan. 19, 1926 Stock Exchange announced that it will issue monthly reports of the aggregate amount of call and time loans of its members. Federal Reserve Bank made similar statement with respect to lendings to brokers by its members.

- Jan. 27, 1926 The Exchange issued statement that "in the future the committee in considering applications for the listing of securities will give careful thought to the matter of voting control."
- Jan. 3, 1927 Trading inaugurated in inactive stocks in 10 share units.
- Oct. 7, 1927 Special requirements for listing of foreign internal shares announced.
- Nov. 17, 1927 First listing of foreign stock under new requirements. (Austrian Credit-Anstalt.)
- Dec. 3, 1927 Abbreviated system of reporting quotations inaugurated, omitting one or more figures of price.
- Jan. 27, 1928 Stock Clearing Corporation inaugurated plan for central delivery of securities between members of the Stock Clearing Corporation and the Bankers Trust Co. and the Guaranty Trust Co. at the Day Branch of the Stock Clearing Corporation. The list of participating banks and trust companies is being gradually expanded and will eventually include practically all Wall Street institutions.
- Mar. 20, 1928 Mr. E. H. H. Simmons, President of the Exchange, addressed the American Chamber of Commerce in London, at London, England, on "The Common Purposes of British and American Finance," and on March 29th addressed The Pilgrims, in London, on "The Anglo-American Relationship." These were the first occasions upon which a president of the Exchange ever spoke officially outside of the United States.
- Apr. 13, 1928 Plans were announced for new and speedier stock ticker, capable of running at more than twice the speed of present tickers.
- Apr. 18, 1928 The Governing Committee voted to admit to the list the United Kingdom of Great Britain and Northern Ireland Four per cent. Funding Loan of 1960-1990 amounting to £388,777,644.
- Apr. 26, 1928 The Governing Committee voted to admit to the list the United Kingdom of Great Britain and Northern Ireland Five per cent. War Loan of 1929-1947 amounting to £2,088,173,638.
- May 14, 1928 New Bond Room opened, adding approximately 6,000 square feet to trading floor.
- Oct. 1, 1928 New central quotation system, for the reporting of bid and asked quotations, inaugurated experimentally at six posts on the trading floor. On February 11, 1929, complete service was inaugurated at all posts on floor.
- Dec. 21, 1928 Purchase of Commercial Cable and Blair Buildings, adjoining present site of Stock Exchange, was announced.
- Jan. 2, 1929 Members of Exchange began wearing identification badges on floor.
- Feb. 7, 1929 Membership increased by 275 new seats; each member received the right to one-fourth of a new seat which he could dispose of by sale or transfer within three years. When this

increase is completed, the membership of the Exchange will number 1,375.

- Feb. 22, 1929 Mr. E. H. H. Simmons, President of the Exchange, addressed the American Club of Paris on "An Indissoluble Friendship."
- Apr. 18, 1929 Stock Clearing Corporation started a system of central delivery between members of the Stock Clearing Corporation and also between members and a selected list of non-members, in a limited number of securities. This list of securities was extended until on May 29, 1929, it included all cleared stocks.
- June 7, 1929 Special tentative requirements for the listing of investment trust shares announced.

APPENDIX B

NEW YORK STOCK EXCHANGE FIRMS IN NEW YORK CITY

Original List as of September, 1929

Italic type indicates other offices of members

Abbott, Hoppin & Co. 120 Broadway 230 <i>Park Avenue</i>	Auerbach, Pollak & Richardson 30 Broad Street 475 <i>Fifth Avenue</i> 66 <i>Leonard Street</i>
Abraham & Co. 120 Broadway	
Adler, Coleman & Co. 15 Broad Street	Baar, Cohen & Co. 50 Broad Street 44 <i>Court Street, Brooklyn</i>
Adrian (Joseph M.) & Co. 50 Broad Street	Babcock, Rushton & Co. 50 Broadway
Allen & Carstens 42 Broadway	Bache (J. S.) & Co. 42 Broadway 250 <i>Park Avenue</i> 16 <i>Court Street, Brooklyn</i>
Ames Brothers 39 Broadway	Bainbridge & Ryan 100 Broadway
Anderson & Co. 120 Broadway	Bamberger Brothers 39 Broadway 511 <i>Fifth Avenue</i> 654 <i>Madison Avenue</i> 250 <i>Park Avenue</i>
Anderson Brothers & Co. 50 Broadway	Barbee & Co. 120 Broadway
Anderson & Fox 43 Broad Street 17 <i>Battery Place</i> 347 <i>Madison Avenue</i>	Barbour & Co. 15 Broad Street
Annenberg, Stein & Co. 60 Broad Street 531 <i>Seventh Avenue</i>	Barnes (H. J.) & Co. (San Francisco, Cal.) 26 <i>Broadway</i>
Appenzellar, Allen & Hill 55 Broadway <i>Hotel Roosevelt</i> <i>St. Regis Hotel</i>	Barney (Chas. D.) & Co. 65 Broadway 654 <i>Madison Avenue</i>
Ardis, Warwick & Co. 120 Broadway 350 <i>Madison Avenue</i>	Barnwell (Arthur) & Co. 5 Nassau Street
Arnold & Co. 60 Broad Street	Barrett & Co. 20 Broad Street
Asiel & Co. 11 Wall Street	

- Barry, Keech & Carey
 52 Broadway
 Barstow & Co.
 79 Wall Street
 598 *Madison Avenue*
 Baruch (Sailing W.) & Co.
 Cotton Exchange Bldg.
 Bauer, Pogue, Pond & Vivian
 20 Pine Street
 Baylis & Co.
 25 Broadway
 420 *Lexington Avenue*
 Bear, Stearns & Co.
 100 Broadway
 1440 *Broadway*
Paramount Building
 Beekman (Wm. B.) & Co.
 20 Broad Street
 Beer (H. & B.)
 60 Broad Street
 Benedict (E. C.) & Co.
 71 Broadway
 Benjamin & Ferguson
 61 Broadway
 578 *Madison Avenue*
 Benjamin, Hill & Co.
 39 Broadway
 Bennett (James E.) & Co.
 23-25 Beaver Street
 Berdell Brothers
 39 Broadway
 Berg, Eyre & Kerr
 50 Broadway
 Billings, Olcott & Co.
 52 Broadway
 Blake Brothers & Co.
 5 Nassau Street
 Block, Maloney & Co.
 50 Broadway
 1775 *Broadway*
 550 *Seventh Avenue*
 2 *Park Avenue*
 1044 *Sixth Avenue*
 Blumenthal Brothers
 71 Broadway
 Blyth & Co.
 120 Broadway
 Blyth & Bonner
 15 Broad Street
 139 *Bleecker Street*
 Boettcher, Newton & Co.
 30 Broad Street
 Bond, McEnany & Co.
 60 Beaver Street
 Boody, McLellan & Co.
 111 Broadway
 319 *Broadway*
 201 *Montague Street, Brooklyn*
 Bouvier (M. C.) & Co.
 20 Broad Street
 Bradley & Co.
 61 Broadway
 Bramley & Smith
 52 Broadway
 Bridgman, Bates & Co.
 26 Broadway
 2 *East 57th Street*
 Brown Brothers & Co.
 59 Wall Street
 Brown & Gruner
 39 Broadway
 Brown (Vernon C.) & Co.
 71 Broadway
 Bruning, Jackson & Co.
 60 Broad Street
 475 *Fifth Avenue*
 Buell & Co.
 63 Wall Street
 Bull & Eldredge
 20 Broad Street
 Burden, Cole & Co.
 120 Broadway
 Burnet (W. E.) & Co.
 11 Wall Street
 Burnham, Herman & Co.
 44 Wall Street
 Burras (H. K.) & Co.
 50 Broadway
 Butler, Beadling & Co.
 11 Wall Street

- Butler, Herrick & Marshall
24 Broad Street
- Cahn (Frank B.) & Co.
120 Broadway
560 *Fifth Avenue*
526 *Seventh Avenue*
- Callaway, Fish & Co.
15 Broad Street
- Campbell (H. G.) & Co.
149 Broadway
- Campbell, Starring & Co.
52 Wall Street
Graybar Building
Heckscher Building
- Carey (H. T.) & Co.
50 Broadway
- Carleton & Mott
170 Broadway
205 *West 72nd Street*
2028 *Fifth Avenue*
439 *Madison Avenue*
140 *West 57th Street*
- Carlisle, Mellick & Co.
50 Broadway
- Carreau & Snedeker
63 Wall Street
- Carter & Co.
115 Broadway
- Caspary (A. H.) & Co.
60 Broadway
- Cassatt & Co.
5 Nassau Street
- Cassel (H.) & Co.
39 Broadway
- Chapin (S. B.) & Co.
111 Broadway
383 *Madison Avenue*
- Chapman, Carman & Co.
100 Broadway
- Chauncey & Co.
61 Broadway
- Chisholm & Chapman
52 Broadway
507 *Fifth Avenue*
- 580 *Fifth Avenue*
290 *Lenox Avenue*
157 *East 86th Street*
391 *East 149th Street*
26 *Court Street, Brooklyn*
- Clark (Henry I.) & Co.
30 Broad Street
- Clark (Jno. F.) & Co. †
27 William Street
49-51 *Hudson Street*
- Clark, Childs & Co.
120 Broadway
6 *East 53rd Street*
Murray Hill Hotel
- Clark, Dodge & Co.
61 Wall Street
460 *Park Avenue*
- Clews (Henry) & Co.
7-9-11 Broadway
253 *Broadway*
36 *Union Square*
234 *Fifth Avenue*
425 *Fifth Avenue*
41 *East 42nd Street*
139 *East 57th Street*
44 *Court Street, Brooklyn*
- Clucas (E. W.) & Co.
60 Wall Street
- Coady, Beinecke & Co.
60 Broad Street
12 *West 44th Street*
- Coggeshall & Hicks
111 Broadway
- Cohen, Simonson & Co.
60 Broad Street
525 *Seventh Avenue*
- Cohen & Streusand
52 Wall Street
- Cohn (Laurence) & Co.
120 Broadway
- Colgate (Jas. B.) & Co.
44 Wall Street
17 *East 42nd Street*
- Collins, Hall & Peckham
39 Broadway

- Colvin & Co.
35 Wall Street
- Content (H.) & Co.
111 Broadway
- Coombe, Kerr & Pratt
120 Broadway
1270 *Broadway*
Manhattan Life Building
- Corlies & Booker
60 Broad Street
- Cowen & Co
120 Broadway
- Curtis & Sanger
49 Wall Street
45 *East 17th Street*
- Cusick (P. F.) & Co.
44 Wall Street
250 *West 57th Street*
- Dane & Co.
111 Broadway
- Dann (J. C.) & Co.
65 Broadway
- Davies, Thomas & Co.
5 Nassau Street
- Davis (Fellowes) & Co.
52 Broadway
- Davis (J. W.) & Co.
111 Broadway
- Davis (Morgan) & Co.
15 Broad Street
963 *Southern Boulevard*
- Day (R. L.) & Co.
14 Wall Street
- DeCoppet & Doremus
42 Broadway
- deCordova (Cyril) & Brother
25 Broad Street
- Degener & Co.
20 Broad Street
- DeHaven & Townsend
52 Broadway
- Delafield & Frothingham
5 Nassau Street
- de Saint Phalle & Co.
11 Broadway
20 *East 57th Street*
230 *Park Avenue*
- Dewey, Bacon & Co.
50 Broadway
- Diffenderffer & Co.
39 Broadway
- Dominick & Dominick
115 Broadway
- Douglas (F. H.) & Co.
61 Broadway
- Drake Brothers
115 Broadway
- Drayton, Penington & Colket
111 Broadway
270 *Park Avenue*
54 *East 54th Street*
44 *Court Street, Brooklyn*
- Drysdale & Co.
71 Broadway
- Du Bosque, De Witt & Co.
44 Wall Street
- Duff (J. Robinson-) & Co.
50 Broadway
- Dunscombe & Co.
71 Broadway
501 *Seventh Avenue*
15 *East 58th Street*
155 *Chambers Street*
44 *Court Street, Brooklyn*
- Durand & Co.
30 Broad Street
- DuVal (H. C.) & Co.
43 Exchange Place
- Dyer, Hudson & Co.
61 Broadway
2581 *Broadway*
200 *Fifth Avenue*
- Eastman, Dillon & Co.
120 Broadway
- Edey & Gibson
39 Broadway
- Edge (C. N.) & Co.
111 Broadway

- Edmonds & Pentz
26 Broadway
- Einstein (H. G.) & Co.
42 Broadway
- Elias (Albert J.) & Co.
20 Broad Street
- Eliott (Gilbert) & Co.
11 Broadway
- Ely & Biddison
61 Broadway
- Emanuel & Co.
32 Broadway
1457 *Broadway*
- Engel & Co.
120 Broadway
461 *Seventh Avenue*
1531 *Broadway*
- Eric & Drevers
115 Broadway
- Ernst & Co.
120 Broadway
16 *Court Street, Brooklyn*
- Eshbaugh (W. H.) & Co.
20 Pine Street
- Estabrook & Co.
24 Broad Street
- Evans, Stillman & Co.
60 Broadway
- Faber, Garvin & Co.
120 Broadway
- Fahnestock & Co.
63 Wall Street
475 *Fifth Avenue*
1775 *Broadway*
654 *Madison Avenue*
- Fahy (Walter J.) & Co.
44 Pine Street
522 *Fifth Avenue*
- Farnum, Winter & Co.
141 Broadway
- Faroll Brothers
50 Broadway
- Farr & Co.
90 Wall Street
277 *Madison Avenue*
- Feitner (Q. F.) & Co.
49 Wall Street
- Fenner & Beane
60 Beaver Street
50 *East 42nd Street*
- Filer & Co.
39 Broadway
- Filor, Bullard & Smyth
39 Broadway
- Finch, Wilson & Co.
120 Broadway
- Fisk (Harvey) & Sons
120 Broadway
251 *West 57th Street*
522 *Fifth Avenue*
- Foster & Adams
120 Broadway
342 *Madison Avenue*
- Foster & Friede
11 Wall Street
- Foster, McConnell & Co.
14 Wall Street
- Fox, O'Hara & Co.
60 Broad Street
Hotel Bretton Hall
551 *Fifth Avenue*
- Frank (Arthur E.) & Co.
100 Broadway
- Frank (Charles A.) & Co.
60 Broad Street
- Frankel (J. D.) & Co.
50 Broad Street
- Fransioli & Wilson
30 Broad Street
- Fried (Albert) & Co.
120 Broadway
- Frost (B. Y.) & Co.
120 Broadway
- Fuller (A. L.) & Co.
120 Broadway

- Gammack & Co.
60 Broadway
- Gardner & Co.
20 Broad Street
- Gibson (R. H.) & Co.
60 Beaver Street
- Gilchrist, Bliss & Co.
120 Broadway
685 *Fifth Avenue*
- Gilmor & Ahern
52 Broadway
- Goadby (W. H.) & Co.
120 Broadway
- Goldburg & Co.
50 Broadway
- Goldman, Sachs & Co.
30 Pine Street
- Goodbody & Co.
115 Broadway
230 *Park Avenue*
- Goodhart (P. J.) & Co.
24 Broad Street
- Gordon & Whitney
115 Broadway
- Gould, Avery & Co.
39 Broadway
- Gray & Wilmerding
5 Nassau Street
- Green, Ellis & Anderson
100 Broadway
277 *Madison Avenue*
- Greenebaum (Fred H.) & Co.
49 Wall Street
- Greer, Crane & Webb
37 Wall Street
501 *Fifth Avenue*
75 *East 45th Street*
- Gruntal, Lilienthal & Co.
60 Broadway
1 *Madison Avenue*
10 *East 44th Street*
350 *Stone Avenue, Brooklyn*
- Gude, Winmill & Co.
11 Wall Street
- 465 *Park Avenue*
905 *Seventh Avenue*
- Gurnett & Co.
39 Broadway
- Hall (Myron S.) & Co.
100 Broadway
- Halladay & Co.
14 Wall street
- Halle & Stieglitz
25 Broad Street
- Hallgarten & Co.
44 Pine Street
- Halsey (C. D.) & Co.
43 Broad Street
Hotel Ambassador
1977 *Broadway*
350 *Madison Avenue*
Hotel Warwick
- Halsted & Harrison
71 Broadway
535 *Fifth Avenue*
- Hamerslag, Borg & Co.
39 Broadway
- Hano, Wasserman & Co.
11 Wall Street
- Harde & Sharp
50 Broadway
572 *Madison Avenue*
2061 *Broadway*
- Hardy & Co.
50 Broad Street
500 *Seventh Avenue*
- Harp, Tierney & Co.
39 Broadway
- Harriman Brothers & Co.
39 Broadway
- Harriman & Co.
111 Broadway
Pershing Square Building
Hotel Biltmore
341 *Madison Avenue*
- Harris & Fuller
120 Broadway

- Harris, Winthrop & Co.
11 Wall Street
578 *Madison Avenue*
- Harrison, Smith & Co.
63 Wall Street
- Harriss & Vose
60 Beaver Street
6 and 8 East 53rd Street
Commodore Hotel
- Hart (Neville G.) & Co.
55 Broadway
Fox Theatre Building, Brooklyn
- Hartshorne, Fales & Co.
71 Broadway
- Haupt (Ira) & Co.
111 Broadway
500 *Seventh Avenue*
1560 *Broadway*
383 *East 149th Street*
- Hayden, Stone & Co.
25 Broad Street
- Hedge & Ellis
14 Wall Street
- Heidelbach, Ickelheimer & Co.
49 Wall Street
- Hemphill, Noyes & Co.
15 Broad Street
- Henderson & Co.
5 Nassau Street
502 *Park Avenue*
- Henderson (Charles F.) & Sons
100 Broadway
- Hendrickson & Co.
61 Broadway
- Hentz (H.) & Co.
60 Beaver Street
6 and 8 East 53rd Street
132 *West 31st Street*
- Herrick, Berg & Co.
14 Wall Street
230 *Park Avenue*
- Herzfeld & Stern
40 Exchange Place
- Herzog & Glazier
24 Broad Street
- Hewitt, Brand & Grumet
30 Broad Street
- Hickie (Howard F.) & Co.
25 Beaver Street
- Hill (Charles W.) & Co.
2 Wall Street
- Hilson & Neuberger
100 Broadway
- Hincks Brothers & Co.
30 Broad Street
- Hirsch, Lilienthal & Co.
165 Broadway
Hotel Belleclaire
Hotel Breslin
Hotel Pennsylvania
Ritz-Carlton Hotel
3 *East 44th Street*
535 *Fifth Avenue*
724 *Fifth Avenue*
- Hiscoe (R. V.) & Co.
111 Broadway
Harriman National Bank Bldg.
- Hitt, Farwell & Co.
48 Wall Street
- Hoge, Underhill & Co.
111 Broadway
- Holmes (J. H.) & Co.
120 Broadway
- Homans & Co.
2 Wall Street
- Hornblower & Weeks
42 Broadway
731 *Fifth Avenue*
- Horton (H. L.) & Co.
43 Broad Street
535 *Fifth Avenue*
1 *East 35th Street*
730 *Fifth Avenue*
17 *East 42nd Street*
Paramount Building
79 *West 50th Street*
- Hoyt (Colgate) & Co.
14 Wall Street
- Hulburd, Warren & Chandler
(Chicago, Ill.)
Produce Exchange Annex

- Hume & Thompson
60 Broadway
- Hutton (E. F.) & Co.
61 Broadway
Hotel Plaza
233 Broadway
527 Fifth Avenue
- Hutton (W. E.) & Co.
52 Wall Street
57 West 57th Street
- Hyde & Miller
15 Broad Street
- Hyman & Co.
61 Broadway
299 Broadway
512 Fifth Avenue
- Ingalls & Snyder
100 Broadway
- Iselin (A.) & Co.
63 Wall Street
- Jackson Bros., Boesel & Co
26 Broadway
230 Park Avenue
- Jackson & Curtis
115 Broadway
- Jacquelin & DeCoppet
43-47 Broad Street
- Jelke (Frazier) & Co.
25 Pine Street
2 East 57th Street
- Jenks, Gwynne & Co.
30 Broad Street
277 Broadway
230 Park Avenue
- Jennys (H. W.) & Co.
30 Broad Street
- Jesup & Lamont
26 Broadway
- Jewett, Newman & Co.
49 Wall Street
57 West 57th Street
15 Central Park, West
- Johnson & Wood
120 Broadway
- Jones (C. Clothier) & Co.
61 Broadway
- Joost, Patrick & Co.
60 Broad Street
- Joseph (Morris) & Co.
25 Beaver Street
- Josephthal & Co.
120 Broadway
654 Madison Avenue
- Kaiser (Louis) & Co.
39 Broadway
Paramount Building
742 Broadway
- Kean, Taylor & Co.
5 Nassau Street
- Keech (F. B.) & Co.
52 Broadway
730 Fifth Avenue
5 East 44th Street
*Williamsburgh Savings Bank Bldg.,
Brooklyn*
- Kerngood & Co.
120 Broadway
2 East 44th Street
- Kerr & Armstrong
30 Broad Street
- Kidder (A. M.) & Co.
5 Nassau Street
- Kidder, Peabody & Co.
17 Wall Street
10 East 45th Street
- Kimball (R. J.) & Co.
7 Nassau Street
- Kinthead, Florentino & Co.
120 Broadway
- Kissel, Kinnicutt & Co.
14 Wall Street
- Knickerbacker (H.) & Co.
25 Broad Street
- Koch (Spencer B.) & Co.
39 Broadway

- Kountze Brothers
141 Broadway
- Kuhn, Loeb & Co.
52-54 William Street
- LaBranche & Co.
50 Broadway
- Ladenburg, Thalmann & Co.
25 Broad Street
- Lage & Co.
160 Broadway
230 *Park Avenue*
6-8 *East 53rd Street*
- Laidlaw & Co.
26 Broadway
252 *Park Avenue*
- Laird, Bissell & Meeds
120 Broadway
1775 *Broadway*
- Lamborn, Hutchings & Co.
37 Wall Street
- Lamson Brothers & Co.
(Chicago, Ill.)
Produce Exchange
- Langley (W. C.) & Co.
115 Broadway
- Lansburgh Brothers
30 Broad Street
- Lapham (Henry G.) & Co.
44 Pine Street
122 *East 42nd Street*
- Lauer (William E.) & Co.
50 Broadway
- Lawrence (Cyrus J.) & Sons
115 Broadway
- Lazard Freres
19 Nassau Street
- Lee, Higginson & Co.
37 Broad Street
- Lehman Brothers
1 William Street
- Leopold (James M.) & Co.
70 Wall Street
- Lewinson (Sydney) & Co.
20 Broad Street
- Lewisohn (Adolph) & Sons
61 Broadway
- Libaire & Co.
37 Wall Street
271 *Madison Avenue*
- Liberman & Stone
25 Broad Street
- Lindley & Co.
52 Broadway
- Lipper (Arthur) & Co.
50 Broad Street
Roosevelt Hotel
353 *Fifth Avenue*
2 *East 57th Street*
- Lisman (F. J.) & Co.
44 Wall Street
- Livingston & Co.
111 Broadway
17 *Battery Place*
12 *East 46th Street*
Paramount Building
- Lloyd & Co.
39 Broadway
- Lober Brothers & Plaut
37 Wall Street
- Lockwood (F. M.) & Co.
52 Broadway
- Loew & Co.
2 Wall Street
230 *Park Avenue*
- Logan & Bryan
42 Broadway
Produce Exchange
- Louchheim, Minton & Co.
111 Broadway
Hotel Astor
347 *Fifth Avenue*
18-20 *East 44th Street*
- Love, Bryan & Co.
50 Broadway
- Lowell & Son
25 Broadway
- Lowitz (E.) & Co.
54 Pine Street
Produce Exchange

- Luber & Shaskan
39 Broadway
- Ludwig, Robertson & Co.
25 Broad Street
- Luke, Banks & Weeks
14 Wall Street
- Mabon & Co.
45 Wall Street
- Mackay & Co.
14 Wall Street
- Maitland, Coppell & Co.
62 William Street
- Mann, Pell & Peake
24 Broad Street
- Manowitch Brothers
50 Broadway
- Manson (Thos. L.) & Co.
100 Broadway
527 *Fifth Avenue*
- Marks & Graham
32 Broadway
498 *Seventh Avenue*
339 *Fifth Avenue*
300 *Madison Avenue*
1422 *St. Nicholas Avenue*
- Marshall (J. G.) & Co.
61 Broadway
- Mayer (Jos. G.) & Co.
74 Trinity Place
- Maynard, Oakley & Lawrence
24 Broad Street
- McCabe & Fradley
39 Broadway
- McCaffray (Walter P.) & Co.
30 Broad Street
- McClave & Co.
67 Exchange Place
1451 *Broadway*
2112 *Broadway*
5 *East 44th Street*
- McClure, Jones & Co.
115 Broadway
- McConnell (H. F.) & Co.
150 Broadway
- McDermott (Peter P.) & Co.
42 Broadway
- McDonnell & Co.
120 Broadway
Produce Exchange
29 *East 53rd Street*
- McGlinn & Co.
61 Broadway
General Motors Building
- McVickar & Co.
25 Broad Street
145 *West 45th Street*
- McWilliam, Wainwright & Co.
49 Wall Street
- Meehan (M. J.) & Co.
61 Broadway
Biltmore Hotel
230 *Park Avenue*
Fordham Road & Morris Avenue
The Sherry-Netherland
16 *Court Street, Brooklyn*
- Melady (John) & Co.
2 Broadway
- Merrill, Lynch & Co.
120 Broadway
11 *East 43rd Street*
- Miller, Hewitt & Dodge
71 Broadway
- Millett, Roe & Co.
120 Broadway
- Monteith & Co.
32 Broadway
- Montgomery, Scott & Co.
45 Wall Street
- Moore (D. T.) & Co.
50 Broad Street
- Moore, Leonard & Lynch
111 Broadway
- Moore & Schley
100 Broadway
730 *Fifth Avenue*
- Morgan (J. P.) & Co.
23 Wall Street

- Morgan, Howland & Co.
120 Broadway
- Morris & Co.
120 Broadway
- Morris & Smith
60 Broad Street
Times Building
- Morrison & Townsend
37 Wall Street
1 *East 53rd Street*
- Moseley (F. S.) & Co.
49 Wall Street
- Moss & Ferguson
11 Wall Street
342 *Madison Avenue*
125 *West 37th Street*
- Moyse & Holmes
100 Broadway
General Motors Building
390 *Madison Avenue*
- Muir (John) & Co.
39 Broadway
11 *West 42nd Street*
41 *East 42nd Street*
- Muir & Loomis
39 Broadway
341 *Madison Avenue*
11 *East 57th Street*
- Munds & Winslow
25 Broad Street
17 *East 42nd Street*
Hotel Vanderbilt
Paramount Building
Savoy-Plaza Hotel
- Murfey, Blossom, Morris & Co.
120 Broadway
- Murphy (G. M.-P.) & Co.
52 Broadway
247 *Park Avenue*
- Nash & Co.
111 Broadway
- Nash, Cloud & Isaacs
5 Nassau Street
- Naumburg, Dixon & Co.
60 Broadway
655 *Fifth Avenue*
- Naumburg (E.) & Co.
48 Wall Street
- Neilson, Burrill & Co.
48 Wall Street
- Neilson & O'Sullivan
20 Broad Street
- Newborg & Co.
60 Broadway
- Newburger, Henderson & Loeb
100 Broadway
202 *Fifth Avenue*
517 *Seventh Avenue*
Hotel Ansonia
1 *East 53rd Street*
- Newman Brothers & Worms
25 Broad Street
16 *East 53rd Street*
2112 *Broadway*
341 *Madison Avenue*
- Nicol, Ford & Co.
(Detroit, Mich.)
115 *Broadway*
- Noel, Berman & Langley
51 Broadway
- Norris & Kenly
111 Broadway
- Noyes (David A.) & Co.
61 Broadway
- Noyes (J. M.) & Co.
39 Broadway
- O'Brian, Potter & Stafford
63 Wall Street
- Oliphant (Jas. H.) & Co.
61 Broadway
230 *Park Avenue*
- Orr, Van Dyne & Krech
61 Broadway
- Orton, Kent & Co.
39 Broadway
11 *West 42nd Street*
- Orvis Brothers & Co.
60 Broadway

- 342 *Madison Avenue*
 1 *Park Avenue*
 570 *Seventh Avenue*
 933 *Seventh Avenue*
 Otis & Co.
 15 *Nassau Street*
 Paine, Webber & Co.
 25 *Broad Street*
 Palmer & Co.
 61 *Broadway*
Heckscher Building
 1 *Park Place*
 230 *Park Avenue*
 17 *Battery Place*
 349 *East 149th Street*
 Parker, McElroy & Co.
 120 *Broadway*
 Parrish & Co.
 25 *Broadway*
 230 *Park Avenue*
 Pask & Walbridge
 14 *Wall Street*
 Pearl & Co.
 71 *Broadway*
 624 *Madison Avenue*
 51 *East 42nd Street*
 66-74 *Court Street, Brooklyn*
 Peck & Co.
 45 *Wall Street*
 Pelzer (B. H. & F. W.)
 52 *Broadway*
 Perkins & Righi
 52 *Broadway*
 Phelps, Ells & McKee
 25 *Broad Street*
 51 *East 42nd Street*
 Pierce (E. A.) & Co.
 11 *Wall Street*
 51 *East 42nd Street*
 Post & Flagg
 49 *Broad Street*
 385 *Madison Avenue*
 Potter & Co.
 5 *Nassau Street*
 54 *East 57th Street*
 Pouch & Co.
 14 *Wall Street*
 342 *Madison Avenue*
 Prentice & Slepach
 25 *Broadway*
 55 *East 44th Street*
 366 *Madison Avenue*
 230 *Park Avenue*
 1501 *Broadway*
 Prentiss (Geo. H.) & Co.
 44 *Wall Street*
 147 *Montague Street, Brooklyn*
 Pressprich (R. W.) & Co.
 160 *Broadway*
 Prince (Theodore) & Co.
 120 *Broadway*
 Prince & Whitely
 25 *Broad Street*
Hotel St. Regis
 Prisco (J. W.) & Co.
 39 *Broadway*
 Pynchon & Co.
 111 *Broadway*
 334 *Madison Avenue*
Heckscher Building
Savoy-Plaza Hotel
 Pyne, Kendall & Hollister
 60 *Wall Street*
 144 *Bleecker Street*
 Quincey (Chas. E.) & Co.
 24 *Broad Street*
 Quinlan & Co.
 11 *Wall Street*
 Redmond & Co.
 48 *Wall Street*
 341 *Madison Avenue*
 Reinhart & Bennet
 52 *Broadway*
 Reynolds & Co.
 65 *Broadway*
 Reynolds, Fish & Co.
 120 *Broadway*
 18 *East 48th Street*

- Rhoades & Co.
27 William Street
475 *Fifth Avenue*
1775 *Broadway*
- Rich & Clark
15 William Street
- Richard (C. B.) & Co.
29 Broadway
26 *Delancey Street*
- Richards & Co.
60 Wall Street
18 *East 53rd Street*
- Richards & Heffernan
49 Wall Street
- Ristine (F. P.) & Co.
15 Broad Street
- Robbins (Charles D.) & Co.
44 Wall Street
- Rollins & Co.
52 Broadway
- Rollins (E. C.) & Co.
52 Broadway
- Roosevelt & Son
30 Pine Street
- Rose (Luke H.) & Co.
71 Broadway
- Rosenthal (Arthur J.) & Co.
111 Broadway
- Roth (B. H.) & Co.
52 Wall Street
- Rothschild (L. F.) & Co.
120 Broadway
- Russell, Miller & Co.
50 Broadway
- Rutter & Co.
14 Wall Street
- Salomon Brothers & Hutzler
60 Wall Street
730 *Fifth Avenue*
- Salomon (F. L.) & Co.
60 Broadway
730 *Fifth Avenue*
Hotel McAlpin
- Sartorius & Smith
61 Broadway
336 *Madison Avenue*
412 *Bedford Avenue, Brooklyn*
- Schafer Brothers
120 Broadway
- Schall (William) & Co.
160 Broadway
- Schatzkin & Co.
60 Broad Street
519 *Fifth Avenue*
- Scheuer (A. L.) & Co.
120 Broadway
336 *Madison Avenue*
- Schmeltzer (J. R.) & Co.
26 Broadway
1 *East 46th Street*
- Scholl (T. F.) & Co.
37 Wall Street
- Scholle Brothers
5 Nassau Street
- Schuyler, Chadwick & Burnham
100 Broadway
- Schuyler, Earl & Co.
6 Wall Street
- Seaman (J. H.) & Co.
32 Liberty Street
- Seasongood & Haas
63 Wall Street
- Seligman (J. & W.) & Co.
54 Wall Street
- Seligmann (G. & A.)
120 Broadway
- Seligsberg & Co.
50 Broad Street
1540 *Broadway*
151 *West 40th Street*
551 *Fifth Avenue*
- Seymour (Edmund) & Co.
63 Wall Street
- Shearson, Hammill & Co.
71 Broadway
350 *Madison Avenue*
- Shippee & Rawson
111 Broadway

- Shuman & Co.
25 Broad Street
3 *East 44th Street*
- Siegel & Co.
39 Broadway
- Silberberg (D. H.) & Co.
63 Wall Street
- Simmons (E. H. H.) & Co.
52 Broadway
- Simmons & Slade
7 Nassau Street
1 *East 44th Street*
- Simons, Blauner & Co.
70 Wall Street
- Sisto (J. A.) & Co.
68 Wall Street
- Smith (Edward B.) & Co.
15 Broad Street
- Smith & Gallatin
115 Broadway
- Smith, Graham & Rockwell
50 Broadway
- Smith (W. E. R.) & Co.
111 Broadway
- Smithers (F. S.) & Co.
15 Broad Street
- Snecker & Heath
20 Broad Street
- Sparks (J. W.) & Co.
50 Broadway
- Spero & Co.
50 Broad Street
- Speyer & Co.
24-26 Pine Street
- Spiegelberg & Plohn
30 Broad Street
- Spingarn (Leopold) & Co.
52 Broadway
- Springs & Co.
60 Beaver Street
15 *West 47th Street*
- Stackpole & Buchanan
45 Wall Street
- Stafford & Co.
30 Broad Street
- Stanton & Co.
61 Broadway
- Stein, Alstrin & Co.
67 Wall Street
- Steinberg (Mark C.) & Co.
42 Broadway
- Steiner, Rouse & Stroock
25 Broad Street
Paramount Building
299 *Madison Avenue*
2112 *Broadway*
- Stephens & Co.
111 Broadway
- Stern (Louis) & Co.
50 Broadway
- Stern, Kempner & Co.
50 Broadway
- Stern & Lowitz
160 Broadway
- Stevens & Legg
25 Broad Street
- Stewart & Co.
61 Broadway
- Stokes, Hodges & Co.
37 Wall Street
- Stone (R. T.) & Co.
120 Broadway
- Stout & Co.
25 Broad Street
342 *Madison Avenue*
- Strassburger & Co.
25 Broad Street
- Straus & Co.
25 Broadway
- Struthers & Dean
49 Wall Street
- Struys & Jones
52 Broadway
- Sulzbacher, Granger & Co.
111 Broadway
2 *East 57th Street*
- Sumner & Hewitt
61 Broadway

- Sutro & Co.
 44 Wall Street
 16 *East 44th Street*
 225 *Broadway*
 Sutro Brothers & Co.
 120 Broadway
 Sutro & Kimbley
 52 Wall Street
- Tailer & Robinson
 39 Broadway
 11 *East 44th Street*
 551 *Fifth Avenue*
 Tameling, Keen & Co.
 50 Broadway
 Tate & Hays
 71 Broadway
 341 *Madison Avenue*
 Taylor, Bates & Co.
 48 Wall Street
 41 *East 42nd Street*
 Taylor (W. R. K.) & Co.
 49 Wall Street
 Tefft & Co.
 5 Nassau Street
 Thomson & McKinnon
 11 Wall Street
 Tift Brothers
 25 Broad Street
 Timmins (J. R.) & Co.
 61 Broadway
 Tobey & Kirk
 25 Broad Street
 Toerge & Schiffer
 15 Broad Street
 Tooker & Co.
 120 Broadway
 522 *Fifth Avenue*
 Trask (Spencer) & Co.
 25 Broad Street
 Travers & Clark
 11 Wall Street
 Trounstone (J. F.) & Co.
 50 Broadway
 655 *Fifth Avenue*
- Tucker, Anthony & Co.
 120 Broadway
 Turner (C. J.) & Son
 60 Broadway
 Turnure (Lawrence) & Co.
 64 Wall Street
 Ungerleider (Samuel) & Co.
 50 Broadway
 1372 *Broadway*
 551 *Fifth Avenue*
 Van Buren (C. H.) & Co.
 55 Broadway
 VanWyck & Sterling
 71 Broadway
 Vaughan & Co.
 52 Broadway
 Vercoe & Co.
 11 Wall Street
 Vick & Beauchamp
 60 Beaver Street
 Vilas & Hickey
 49 Wall Street
 Wade Brothers & Co.
 55 Broadway
 1775 *Broadway*
 78 *Broad Street*
 50 *East 42nd Street*
 84 *Front Street*
 26 *Court Street, Brooklyn*
 Wadsworth & Wright
 2 Wall Street
 Wainwright (H. C.) & Co.
 111 Broadway
 Walker Brothers
 71 Broadway
 Murray Hill Hotel
 Walker (Joseph) & Sons
 61 Broadway
 Waller & Co.
 24 Broad Street
 Ward, Gruver & Co.
 20 Broad Street

- 131 *East 86th Street*
 100 *Hudson Street*
 Warner & Co.
 11 Wall Street
 370 *Seventh Avenue*
Williamsburg Savings Bank Bldg.,
Brooklyn
 Watson, Armstrong & Co.
 24 Broad Street
 Watson (George H.) & Co.
 149 Broadway
 Watson (T. L.) & Co.
 30 Broad Street
 Watson & White
 149 Broadway
 51 *Madison Avenue*
 111 *East 48th Street*
 Weisl (Edwin) & Co.
 25 Broad Street
 604 *Fifth Avenue*
 Welles (C. E.) & Co.
 39 Broadway
 508 *Park Avenue*
 Wellington & Co.
 120 Broadway
 Wertheim & Co.
 57 William Street
 West & Co.
 63 Wall Street
 Whitehouse & Co.
 111 Broadway
 522 *Fifth Avenue*
 186 *Remsen Street, Brooklyn*
 885 *Flatbush Avenue, Brooklyn*
 White, Weld & Co.
 14 Wall Street
 Whitney (H. N.) & Sons
 49 Wall Street
 522 *Fifth Avenue*
 Whitney (Richard) & Co.
 15 Broad Street
 Wightman, Breining & Co.
 17 *Battery Place*
 4 *East 39th Street*
Graybar Building
 Wilcox & Co.
 52 Broadway
 Williams (Clark) & Co.
 160 Broadway
 393 *Seventh Avenue*
 1 *East 42nd Street*
 Williams, Nicholas & Moran
 25 Broad Street
 Williston (J. R.) & Co.
 11 Wall Street
 Winslow, Lanier & Co.
 49 Wall Street
 Winsor, Trowbridge & Co.
 115 Broadway
 Winthrop (Robert) & Co.
 48 Wall Street
 Wollman (W. J.) & Co.
 120 Broadway
 Wood, Low & Co.
 63 Wall Street
 Wood, Struthers & Co.
 20 Pine Street
 Woodworth, Lounsbury & Co.
 52 Broadway
 16 *East 53rd Street*
 Worden & Low
 25 Broadway
 Wrenn Brothers & Co.
 25 Broadway
 Wright & Sexton
 30 Broad Street
 Wright, Slade & Co.
 71 Broadway
 1775 *Broadway*
 17 *East 42nd Street*
 572-76 *Madison Avenue*
 Zeltner (C. F.) & Co.
 61 Broadway
 Zuckerman (Henry) & Co.
 52 Broadway

NEW YORK STOCK EXCHANGE FIRMS AND OTHER OFFICES OF
MEMBERS OUTSIDE OF NEW YORK CITY

AKRON, OHIO

Baylis & Co.
Harriss & Vose
Livingston & Co.
Murfey, Blossom, Morris & Co.
Otis & Co.
Prince & Whitely

ALBANY, N. Y.

Bache (J. S.) & Co.
Bauer, Pogue, Pond & Vivian
Clark, Childs & Co.
Hemphill, Noyes & Co.
Moseley (F. S.) & Co.
Paine, Webber & Co.
Parker, McElroy & Co.
Prince & Whitely
Redmond & Co.
Smith (Edward B.) & Co.
Trask (Spencer) & Co.
Tucker, Anthony & Co.

ALLENHURST, N. J.

Beer (H. & B.)
Wright, Slade & Co.

ALLENTOWN, PA.

Cassatt & Co.
Eastman, Dillon & Co.
Elkins, Morris & Co.
Smith (Edward B.) & Co.

ALTOONA, PA.

Cassatt & Co.
West & Co.

AMARILLO, TEXAS

Clark (Jno. F.) & Co.

ANN ARBOR, MICH.

Merrill, Lynch & Co.

APPLETON, WIS.

Seaverns & Co.

ARDMORE, OKLA.

Beer (H. & B.)

ASBURY PARK, N. J.

Lipper (Arthur) & Co.

McDonnell & Co.

Sulzbacher, Granger & Co.

ASHEVILLE, N. C.

Clark (Jno. F.) & Co.
Fenner & Beane
Stein Brothers & Boyce

ATHENS, GA.

Clark (Jno. F.) & Co.

ATLANTA, GA.

Beer (H. & B.)
Blyth & Co.
Clark (Jno. F.) & Co.
Courts & Co.
Fenner & Beane
Gray & Wilmerding
Jackson Brothers, Boesel & Co.
Livingston & Co.
Post & Flagg

ATLANTIC CITY, N. J.

Bache (J. S.) & Co.
Block, Maloney & Co.
Dyer, Hudson & Co.
Fenner & Beane
Halle & Stieglitz
Horton (H. L.) & Co.
Lipper (Arthur) & Co.
Meehan (M. J.) & Co.
Orvis Brothers & Co.
Ungerleider (Samuel) & Co.

AUBURN, N. Y.

Sutro Brothers & Co.
Wright (A. J.) & Co.

AUGUSTA, MAINE

Gurnett & Co.

AUSTIN, TEXAS

Bache (J. S.) & Co.
Fenner & Beane

BALTIMORE, MD.

Baker, Watts & Co.
Cahn (Frank B.) & Co.
Cassatt & Co.

- Halle & Stieglitz
 Harriman & Co.
 Harris & Fuller
 Hemphill, Noyes & Co.
 Iglehart (J. A. W.) & Co.
 Lanahan (W. W.) & Co.
 Lockwood (F. M.) & Co.
 Mackubin, Goodrich & Co.
 Stein Brothers & Boyce
 Westheimer & Co.
 Whitehouse & Co.
 Wilson (J. S.), Jr. & Co.
- BANGOR, MAINE
 Gurnett & Co.
 Wrenn Brothers & Co.
- BARNESVILLE, OHIO
 Hazlett & Burt
- BARTLESVILLE, OKLA.
 Fenner & Beane
 McGreevy & Co.
- BATON ROUGE, LA.
 Fenner & Beane
- BATTLE CREEK, MICH.
 Hulburd, Warren & Chandler
 Pyncheon & Co.
- BAYONNE, N. J.
 Kaiser (Louis) & Co.
- BEAUMONT, TEXAS
 Beer (H. & B.)
 Fenner & Beane
- BERKELEY, CAL.
 Cavalier (Wm.) & Co.
- BERLIN, GERMANY
 Hentz (H.) & Co.
- BETHLEHEM, PA.
 Elkins, Morris & Co.
 Harrison, Smith & Co.
 Hentz (H.) & Co.
- BEVERLY HILLS, CAL.
 Anderson & Fox
 Logan & Bryan
- BIARRITZ, FRANCE
 Hentz (H.) & Co.
- BINGHAMTON, N. Y.
 Bache (J. S.) & Co.
- Brooks (J. H.) & Co.
 Dyer, Hudson & Co.
- BIRMINGHAM, ALA.
 Beer (H. & B.)
 Clark (Jno. F.) & Co.
 Fenner & Beane
 Gray & Wilmerding
 Steiner, Rouse & Stroock
- BLOOMFIELD, N. J.
 Billings, Olcott & Co.
- BOSTON, MASS.
 Blake Brothers & Co.
 Blyth & Co.
 Bowen (J. W.) & Co.
 Bright (Elmer H.) & Co.
 Bright, Sears & Co.
 Brown Brothers & Co.
 Burr, Gannett & Co.
 Clark, Childs & Co.
 Clark (Jno. F.) & Co.
 Curtis & Sanger
 Dabney (F. L.) & Co.
 Day (R. L.) & Co.
 Estabrook & Co.
 Farr & Co.
 Goldman, Sachs & Co.
 Gray & Wilmerding
 Gurnett & Co.
 Hamlin (E. M.) & Co.
 Harriss & Vose
 Hayden, Stone & Co.
 Hemphill, Noyes & Co.
 Hentz (H.) & Co.
 Hornblower & Weeks
 Hovey (Chandler) & Co.
 Hutchins & Parkinson
 Jackson Brothers, Boesel & Co.
 Jackson & Curtis
 Kidder, Peabody & Co.
 Lage & Co.
 Laidlaw & Co.
 Lapham (Henry G.) & Co.
 Lee, Higginson & Co.
 Moseley (F. S.) & Co.
 Naumburg (E.) & Co.
 Paine, Webber & Co.
 Prince (F. H.) & Co.

- Prince (Theodore) & Co.
Proctor, Cook & Co.
Rutter & Co.
Salomon Brothers & Hutzler
Schirmer, Atherton & Co.
Smith (Edward B.) & Co.
Townsend, Anthony & Tyson
Trask (Spencer) & Co.
Tucker, Anthony & Co.
Wainwright (H. C.) & Co.
Watson & White
Weld, Grew & Co.
Whitney & Elwell
White, Weld & Co.
Williston (J. R.) & Co.
Wrenn Brothers & Co.
- BRADFORD, PA.
Wright (A. J.) & Co.
- BRIDGEPORT, CONN.
Hemphill, Noyes & Co.
Hincks Brothers & Co.
Hirsch, Lilienthal & Co.
Pearl & Co.
Watson (T. L.) & Co.
- BRIDGETON, N. J.
Goodbody & Co.
- BRISTOL, VA.
Bryan, Kemp & Co.
- BROCKTON, MASS.
Proctor, Cook & Co.
- BRONXVILLE, N. Y.
Drayton, Penington & Colket
- BROOKLINE, MASS.
Kidder, Peabody & Co.
- BROOKLYN, N. Y.
Baar, Cohen & Co.
Bache (J. S.) & Co.
Boody, McLellan & Co.
Chisholm & Chapman
Clews (Henry) & Co.
Drayton, Penington & Colket
Dunscombe & Co.
Ernst & Co.
Gruntal, Lilienthal & Co.
Hart (Neville G.) & Co.
Keech (F. B.) & Co.
- Meehan (M. J.) & Co.
Pearl & Co.
Prentiss (Geo. H.) & Co.
Sartorius & Smith
Wade Brothers & Co.
Warner & Co.
Whitehouse & Co.
- BUFFALO, N. Y.
Babcock, Schoellkopf & Co.
Bache (J. S.) & Co.
Clark (Jno. F.) & Co.
Cook, Bellinger & Taylor
Dann (J. C.) & Co.
Drayton, Penington & Colket
Gardner (W. A.) & Co.
Hemphill, Noyes & Co.
Jackson Brothers, Boesel & Co.
Lamson Brothers & Co.
O'Brian, Potter & Staffor
Perkins (Erickson) & Co.
Pierce (E. A.) & Co.
Smith (Edward B.) & Co.
Wright (A. J.) & Co.
- BUTLER, PA.
Kay, Richards & Co.
Masten (A. E.) & Co.
- BUTTE, MONTANA
Logan & Bryan
- CAIRO, ILL.
Bennett (James E.) & Co.
- CAMBRIDGE, MASS.
Kidder, Peabody & Co.
- CAMDEN, N. J.
Butcher & Sherrerd
Jones (C. Clothier) & Co.
McClure, Jones & Co.
- CANTON, OHIO
Otis & Co.
Ungerleider (Samuel) & Co.
- CASPER, WYO.
Bennett (James E.) & Co.
- CEDARHURST, L. I.
Gude, Winmill & Co.
- CEDAR RAPIDS, IOWA
Bennett (James E.) & Co.
Lamson Brothers & Co.

- CHAMBERSBURG, PA.
Cassatt & Co.
- CHARLESTON, S. C.
Blyth & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
- CHARLESTON, W. VA.
Harris, Winthrop & Co.
Iglehart (J. A. W.) & Co.
Stein Brothers & Boyce
- CHARLOTTE, N. C.
Bache (J. S.) & Co.
Barney (Chas. D.) & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
Livingston & Co.
Post & Flagg
- CHARLOTTESVILLE, VA.
Fenner & Beane
- CHATTANOOGA, TENN.
Clark (Jno. F.) & Co.
Fenner & Beane
- CHESTER, PA.
McCreery (Samuel) & Co.
- CHEYENNE, WYO.
Bennett (James E.) & Co.
- CHICAGO, ILL.
Babcock, Rushton & Co.
Bache (J. S.) & Co.
Baker (Alfred L.) & Co.
Bennett (James E.) & Co.
Blyth & Co.
Brown Brothers & Co.
Chapin (S. B.) & Co.
Clark (Jno. F.) & Co.
Clement, Curtis & Co.
Clucas (E. W.) & Co.
Colvin & Co.
Cooke (James L.) & Co.
Davis (Paul H.) & Co.
Eastman, Dillon & Co.
Farnum, Winter & Co.
Faroll Brothers
Goldman, Sachs & Co.
Hallgarten & Co.
Harris, Winthrop & Co.
- Hornblower & Weeks
Howell, Thomas M.
Hulburt, Warren & Chandler
Jackson Brothers, Boesel & Co.
Jackson & Curtis
Jelke, (Frazier) & Co.
Keech (F. B.) & Co.
Kissel, Kinnicutt & Co.
Lage & Co.
Lamborn, Hutchings & Co.
Lamson Brothers & Co.
Lee, Higginson & Co.
Lisman (F. J.) & Co.
Logan & Bryan
Lowitz (E.) & Co.
Merrill, Lynch & Co.
Mitchell, Hutchins & Co.
Morrison & Townsend
Moseley (F. S.) & Co.
Naumburg (E.) & Co.
Norris & Kenly
Noyes (David A.) & Co.
Oliphant (Jas. H.) & Co.
Otis & Co.
Paine, Webber & Co.
Pierce (E. A.) & Co.
Prince & Whitely
Pyncheon & Co.
Rothschild & Co.
Russell, Brewster & Co.
Salomon Brothers & Hutzler
Scott, Burrows & Christie
Seaverns & Co.
Seligmann (G. & A.)
Shearson, Hammill & Co.
Sincere (Charles) & Co.
Slaughter (A. O.) & Co.
Smith, Graham & Rockwell
Stein, Alstrin & Co.
Sutro Brothers & Co.
Thomson & McKinnon
Trask (Spencer) & Co.
Trumbull, Wardell & Co.
White, Weld & Co.
- CHICKASHA, OKLA.
Beer (H. & B.)
- CINCINNATI, OHIO
Bartlett (Benj. D.) & Co.

- Clark (Jno. F.) & Co.
Dominick & Dominick
Dyer, Hudson & Co.
Gibson (R. H.) & Co.
Gradison, Willis D.
Hill (Alfred) & Co.
Hutton (W. E.) & Co.
Otis & Co.
Roberts & Hall
Westheimer & Co.
- CLAREMONT, N. H.
Dabney (F. L.) & Co.
- CLARKSBURG, W. VA.
Iglehart (J. A. W.) & Co.
Stein Brothers & Boyce
- CLARKSVILLE, TENN.
Fenner & Beane
- CLEVELAND, OHIO
Dyer, Hudson & Co.
Ettinger & Hirst
Hemphill, Noyes & Co.
Hornblower & Weeks
Hord, Curtiss & Co.
Lamson Brothers & Co.
Livingston & Co.
Murfey, Blossom, Morris & Co.
Otis & Co.
Paine, Webber & Co.
Prince & Whitely
Salomon Brothers & Hutzler
Ungerleider (Samuel) & Co.
- COLORADO SPRINGS, COLO.
Boettcher, Newton & Co.
Otis & Co.
- COLUMBIA, S. C.
Clark (Jno. F.) & Co.
Pierce (E. A.) & Co.
- COLUMBUS, GA.
Fenner & Beane
- COLUMBUS, OHIO
Otis & Co.
Ungerleider (Samuel) & Co.
Vercoe & Co.
- CONCORD, N. H.
Paine, Webber & Co.
- CONEY ISLAND, N. Y.
Fenner & Beane
- CORONADO BEACH, CAL.
Logan & Bryan
- CORPUS CHRISTI, TEXAS
Fenner & Beane
- CORSICANA, TEXAS
Fenner & Beane
- CUERO, TEXAS
Fenner & Beane
- DALLAS, TEXAS
Anderson (Lorenzo E.) & Co.
Beer (H. & B.)
Bennett (James E.) & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
Jenks, Gwynne & Co.
Pierce (E. A.) & Co.
- DANVILLE, ILL.
Bennett (James E.) & Co.
- DANVILLE, KY.
Lyons (W. L.) & Co.
- DANVILLE, VA.
Clark (Jno. F.) & Co.
Thomson & McKinnon
- DAVENPORT, IOWA
Harris, Winthrop & Co.
Lamson Brothers & Co.
- DAYTON, OHIO
Dominick & Dominick
Hutton (W. E.) & Co.
Westheimer & Co.
- DECATUR, ILL.
Bennett (James E.) & Co.
- DEKALB, ILL.
Lamson Brothers & Co.
- DEL MONTE, CAL.
Hutton (E. F.) & Co.
- DENVER, COLO.
Bennett (James E.) & Co.
Boettcher, Newton & Co.
Merrill, Lynch & Co.
Otis & Co.

DES MOINES, IOWA

Babcock, Rushton & Co.
Lamson Brothers & Co.

DETROIT, MICH.

Bache (J. S.) & Co.
Bennett, Smith & Co.
Clark, Childs & Co.
Dewey, Bacon & Co.
Eastman, Dillon & Co.
Harris, Winthrop & Co.
Hentz (H.) & Co.
Holmes (J. H.) & Co.
Hornblower & Weeks
Hutton (W. E.) & Co.
Jackson Brothers, Boesel & Co.
MacCrone (E. E.) & Co.
Merrill, Lynch & Co.
Morrison & Townsend
Nicol, Ford & Co.
Noble (H. W.) & Co.
Otis & Co.
Paine, Webber & Co.
Prince & Whitely
Trask (Spencer) & Co.
Ungerleider (Samuel) & Co.
Watling, Lerchen & Hayes

DOVER, DEL.

Cassatt & Co.

DUBUQUE, IOWA

Lamson Brothers & Co.

DULUTH, MINN.

Logan & Bryan
Paine, Webber & Co.

DURHAM, N. C.

Barbee & Co.
Clark (Jno. F.) & Co.

EAGLE RIVER, WIS.

Thomson & McKinnon

EASTHAMPTON, L. I., N. Y.

Bouvier (M. C.) & Co.

EAST LIBERTY, PA.

Holmes (J. H.) & Co.

EAST LIVERPOOL, OHIO

Hazlett & Burt

EASTON, PA.

Barney (Chas. D.) & Co.
Clark (E. W.) & Co.
Smith (Edward B.) & Co.

EAST ORANGE, N. J.

Dane & Co.

EAST ST. LOUIS, ILL.

Steinberg (Mark C.) & Co.

EDGARTOWN, MASS.

Auerbach, Pollak & Richardson

ELIZABETH, N. J.

Harriss & Vose
Ristine (F. P.) & Co.

ELIZABETH CITY, N. C.

Livingston & Co.

ELMIRA, N. Y.

Cassatt & Co.
Hemphill, Noyes & Co.

ENID, OKLA.

Bennett (James E.) & Co.

ERIE, PA.

Bache (J. S.) & Co.
Hemphill, Noyes & Co.
Kay, Richards & Co.

EVANSVILLE, IND.

Harris, Winthrop & Co.
Thomson & McKinnon

FALL RIVER, MASS.

Bright, Sears & Co.
Hamlin (E. M.) & Co.
Tucker, Anthony & Co.

FALMOUTH, MASS.

Proctor, Cook & Co.

FARMVILLE, N. C.

Clark (Jno. F.) & Co.

FAR ROCKAWAY, L. I., N. Y.

Morris & Smith

FAYETTEVILLE, N. C.

Clark (Jno. F.) & Co.

FINDLAY, OHIO

Ungerleider (Samuel) & Co.

FITCHBURG, MASS.

Dabney (F. L.) & Co.

- FLINT, MICH.
Hulburd, Warren & Chandler
MacCrone (E. E.) & Co.
Noble (H. W.) & Co.
Paine, Webber & Co.
- FLORENCE, S. C.
Clark (Jno. F.) & Co.
- FLUSHING, L. I., N. Y.
Chisholm & Chapman
Libaire & Co.
- FORT DODGE, IOWA
Bennett (James E.) & Co.
Lamson Brothers & Co.
- FORT SMITH, ARK.
Clark (Jno. F.) & Co.
- FORT WAYNE, IND.
Thomson & McKinnon
- FORT WORTH, TEXAS
Bache (J. S.) & Co.
Bennett (James E.) & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
- FRANKFORT, IND.
Lamson Brothers & Co.
- FRANKLIN, PA.
Holmes (J. H.) & Co.
Laidlaw & Co.
- FRENCH LICK, IND.
Logan & Bryan
- GADSDEN, ALA.
Beer (H. & B.)
Fenner & Beane
- GAINESVILLE, TEXAS
Clark (Jno. F.) & Co.
- GALESBURG, ILL.
Bennett (James E.) & Co.
Lamson Brothers & Co.
- GALVESTON, TEXAS
Fenner & Beane
- GASTONIA, N. C.
Clark (Jno. F.) & Co.
- GENEVA, N. Y.
Goodbody & Co.
- GERMANTOWN, PHILA., PA.
MacDonald & Co.
- GILMAN, ILL.
Lamson Brothers & Co.
- GLEN COVE, L. I., N. Y.
Gude, Winmill & Co.
- GLENS FALLS, N. Y.
Trask (Spencer) & Co.
- GOLDSBORO, N. C.
Clark (Jno. F.) & Co.
- GRAND RAPIDS, MICH.
Hulburd, Warren & Chandler
Logan & Bryan
MacCrone (E. E.) & Co.
Paine, Webber & Co.
- GREAT NECK, L. I., N. Y.
Newman Brothers & Worms
- GREENSBORO, N. C.
Bache (J. S.) & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
Livingston & Co.
Pierce (E. A.) & Co.
- GREENSBURG, PA.
Holmes (J. H.) & Co.
Moore, Leonard & Lynch
- GREENVILLE, N. C.
Clark (Jno. F.) & Co.
- GREENVILLE, S. C.
Bache (J. S.) & Co.
- GREENVILLE, TEXAS
Fenner & Beane
- GREENWICH, CONN.
Chisholm & Chapman
- HACKENSACK, N. J.
Walker (Joseph) & Sons
- HAGERSTOWN, MD.
Hemphill, Noyes & Co.
Stein Brothers & Boyce
- HAMILTON, CANADA
Pierce (E. A.) & Co.
- HARLINGEN, TEXAS
Clark (Jno. F.) & Co.

- HARRISBURG, PA.
 Cassatt & Co.
 Dyer, Hudson & Co.
 Jones (C. Clothier) & Co.
 Parrish & Co.
 West & Co.
- HARRISONBURG, VA.
 Branch, Cabell & Co.
- HARTFORD, CONN.
 Adams, Merrill & Co.
 Ballard & Co.
 Cooley (Francis R.) & Co.
 Estabrook & Co.
 Hemphill, Noyes & Co.
 Hincks Brothers & Co.
 Lee, Higginson & Co.
 Paine, Webber & Co.
 Prince & Whitely
 Putnam & Co.
 Rutter & Co.
 Thomson, Fenn & Co.
- HAVANA, CUBA
 Lamborn, Hutchings & Co.
- HAVERHILL, MASS.
 Bright (Elmer H.) & Co.
- HAYNESVILLE, LA.
 Beer (H. & B.)
- HAZLETON, PA.
 Brooks (J. H.) & Co.
 Jones (C. Clothier) & Co.
- HELENA, ARK.
 Fenner & Beane
- HIGH POINT, N. C.
 Bache (J. S.) & Co.
- HILLSBORO, TEXAS
 Beer (H. & B.)
- HOBOKEN, N. J.
 Benjamin, Hill & Co.
- HOLLAND, MICH.
 MacCrone (E. E.) & Co.
- HOLLYWOOD, CAL.
 Anderson & Fox
 Barneson (H. J.) & Co.
 Drake (Wilcox) & Co.
 Hutton (E. F.) & Co.
- Logan & Bryan
 Witter (Dean) & Co.
- HOLYOKE, MASS.
 Watson & White
- HONOLULU, HAWAII
 Witter (Dean) & Co.
- HOT SPRINGS, ARK.
 Fenner & Beane
- HOT SPRINGS, VA.
 Logan & Bryan
- HOUGHTON, MICH.
 Paine, Webber & Co.
- HOULTON, MAINE
 Wrenn Brothers & Co.
- HOUSTON, TEXAS
 Bache (J. S.) & Co.
 Beer (H. & B.)
 Bennett (James E.) & Co.
 Clark (Jno. F.) & Co.
 Fenner & Beane
 Gray & Wilmerding
 Pierce (E. A.) & Co.
 Walker (G. H.) & Co.
- HUNTINGDON, PA.
 Elkins, Morris & Co.
- HUNTINGTON, L. I., N. Y.
 Gude, Winmill & Co.
- HUNTSVILLE, ALA.
 Clark (Jno. F.) & Co.
- HUTCHINSON, KANSAS
 Bennett (James E.) & Co.
- HYANNIS, MASS.
 Hamlin (E. M.) & Co.
 Proctor, Cook & Co.
- INDEPENDENCE, KANSAS
 Fenner & Beane
 McGreevy & Co.
- INDIANA, PA.
 Hemphill, Noyes & Co.
- INDIANAPOLIS, IND.
 Bennett (James E.) & Co.
 Blyth & Co.
 Roberts & Hall
 Thomson & McKinnon

IOWA FALLS, IOWA
Lamson Brothers & Co.

JACKSON, MICH.
MacCrone (E. E.) & Co.
Nicol, Ford & Co.

JACKSON, TENN.
Beer (H. & B.)
Fenner & Beane

JACKSONVILLE, FLA.
Clark (Jno. F.) & Co.
Thomson & McKinnon

JACKSONVILLE, ILL.
Bennett (James E.) & Co.

JAMAICA, L. I., N. Y.
Bauer, Pogue, Pond & Vivian
Prentice & Slepach

JAMESTOWN, N. Y.
Marks & Graham
O'Brian, Potter & Stafford

JENKINTOWN, PA.
Carstairs & Co.

JERSEY CITY, N. J.
Carreau & Snedeker
Clausas (E. W.) & Co.
Goodbody & Co.
Gruntal, Lilienthal & Co.
Harde & Sharp
Herrick, Berg & Co.
Kaiser (Louis) & Co.
Rothschild (L. F.) & Co.

JOHNSTOWN, PA.
Cassatt & Co.
West & Co.

KALAMAZOO, MICH.
Hulburd, Warren & Chandler

KANKAKEE, ILL.
Bennett (James E.) & Co.

KANSAS CITY, Mo.
Bache (J. S.) & Co.
Bennett (James E.) & Co.
Farnum, Winter & Co.
Harris, Winthrop & Co.
Jackson Brothers, Boesel & Co.
Lamson Brothers & Co.
McGreevy & Co.

Trask (Spencer) & Co.
Wollman (W. J.) & Co.

KENOSHA, WIS.
Lowitz (E.) & Co.
Norris & Kenly

KEWANEE, ILL.
Bennett (James E.) & Co.

KINGSTON, N. Y.
Davis (Morgan) & Co.
Parker, McElroy & Co.

KNOXVILLE, TENN.
Bauer, Pogue, Pond & Vivian

LA FAYETTE, IND.
Jackson Brothers, Boesel & Co.
Lamson Brothers & Co.

LA GRANGE, GA.
Fenner & Beane

LAKE CHARLES, LA.
Clark (Jno. F.) & Co.

LAKE PLACID, N. Y.
Lober Brothers & Plaut
Meehan (M. J.) & Co.
Moyse & Holmes

LANCASTER, PA.
Blyth & Co.
Hemphill, Noyes & Co.
Jones (C. Clothier) & Co.
West & Co.

LANSING, MICH.
Hulburd, Warren & Chandler
MacCrone (E. E.) & Co.
Noble (H. W.) & Co.

LAUREL, MISS.
Fenner & Beane

LAURINBURG, N. C.
Clark (Jno. F.) & Co.

LEBANON, PA.
Newburger, Henderson & Loeb

LEWISTON, MAINE
Gurnett & Co.
Wrenn Brothers & Co.

LEXINGTON, KY.
Hutton (W. E.) & Co.
Lyons (W. L.) & Co.

LIMA, OHIO

Thomson & McKinnon

LINCOLN, NEB.

Jackson Brothers, Boesel & Co.

Lamson Brothers & Co.

LITTLE ROCK, ARK.

Clark (Jno. F.) & Co.

Fenner & Beane

LIVERPOOL, ENGLAND

Pyncheon & Co.

LOCKPORT, N. Y.

Babcock, Schoellkopf & Co.

LONDON, ENGLAND

Blyth & Co.

Fisk (Harvey) & Sons

Hallgarten & Co.

Murphy (G. M.-P.) & Co.

Pyncheon & Co.

Tucker, Anthony & Co.

LONG BEACH, CAL.

Blyth & Co.

Logan & Bryan

LONG BEACH, L. I., N. Y.

Morris & Smith

Munds & Winslow

LONG BRANCH, N. J.

Kaiser (Louis) & Co.

LONG ISLAND CITY, N. Y.

Chisholm & Chapman

LOS ANGELES, CAL.

Anderson & Fox

Barnes (H. J.) & Co.

Blyth & Co.

Cavalier (Wm.) & Co.

Drake (Wilcox) & Co.

Graves, Banning & Co.

Hutton (E. F.) & Co.

Logan & Bryan

Merrill, Lynch & Co.

Pierce (E. A.) & Co.

Russell, Miller & Co.

Sutro & Co.

Walsh, O'Connor & Co.

Witter (Dean) & Co.

LOUISIANA, Mo.

Bennett (James E.) & Co.

LOUISVILLE, KY.

Barney (Chas. D.) & Co.

Blyth & Co.

Chambers (Henning) & Co.

Hilliard (J. J. B.) & Son

Lyons (W. L.) & Co.

Stein Brothers & Boyce

LOWELL, MASS.

Bright, Sears & Co.

Proctor, Cook & Co.

LYNCHBURG, VA.

Thomson & McKinnon

LYNN, MASS.

Jackson & Curtis

Tucker, Anthony & Co.

MACKINAC ISLAND, MICH.

Hentz (H.) & Co.

MACON, GA.

Livingston & Co.

MADISON, WIS.

Hulburd, Warren & Chandler

MAGNOLIA, MASS.

Hovey (Chandler) & Co.

MANCHESTER, ENGLAND

Pyncheon & Co.

MANCHESTER, N. H.

Tucker, Anthony & Co.

Wrenn Brothers & Co.

MANCHESTER, VT.

Munds & Winslow

MANSFIELD, OHIO

Vercoe & Co.

MARIETTA, OHIO

Hazlett & Burt

Holloway (J. D.) & Co.

MARSHALLTOWN, IOWA

Lamson Brothers & Co.

MASON CITY, IOWA

Lamson Brothers & Co.

MASSILLON, OHIO

Otis & Co.

McKEESPORT, PA.

Holmes (J. H.) & Co.

- MEADVILLE, PA.
Kay, Richards & Co.
- MEMPHIS, TENN.
Anderson (Oliver J.) & Co.
Beer (H. & B.)
Bennett (James E.) & Co.
Clark (Jno. F.) & Co.
Fenner & Beane
Jackson Brothers, Boesel & Co.
Pierce (E. A.) & Co.
- MENDOTA, ILL.
Lamson Brothers & Co.
- MERIDEN, CONN.
Harde & Sharp
Hincks Brothers & Co.
Pearl & Co.
- MERIDIAN, MISS.
Fenner & Beane
- MIAMI, FLA.
Thomson & McKinnon
- MIDDLETOWN, CONN.
Hincks Brothers & Co.
- MIDDLETOWN, N. Y.
Carey (H. T.) & Co.
- MILWAUKEE, WIS.
Bennett (James E.) & Co.
Blyth & Co.
Farnum, Winter & Co.
Lee, Higginson & Co.
Mitchell, Hutchins & Co.
Otis & Co.
Paine, Webber & Co.
Pynchon & Co.
Scott, Burrows & Christie
- MINNEAPOLIS, MINN.
Bennett (James E.) & Co.
Blyth & Co.
Farnum, Winter & Co.
Harris, Winthrop & Co.
Hopwood & Co.
Lewis (Charles E.) & Co.
Livingston & Co.
Logan & Bryan
Paine, Webber and Co.
Salomon Brothers & Hutzler
- MOBILE, ALA.
Clark (Jno. F.) & Co.
Fenner & Beane
- MONTAUK POINT, L. I., N. Y.
Thomson & McKinnon
- MONTCLAIR, N. J.
Schuyler, Chadwick & Burnham
- MONTEREY, CAL.
Russel, Miller & Co.
- MONTGOMERY, ALA.
Clark (Jno. F.) & Co.
Fenner & Beane
- MONTREAL, CANADA
Billings, Olcott & Co.
de Saint Phalle & Co.
Harris, Winthrop & Co.
Hemphill, Noyes & Co.
Jenks, Gwynne & Co.
Laidlaw & Co.
Livingston & Co.
Logan & Bryan
Post & Flag
Rothschild (L. F.) & Co.
Shearson, Hammill & Co.
Timmins (J. R.) & Co.
- MORRISTOWN, N. J.
Walker Brothers
- MT. VERNON, N. Y.
Kaiser (Louis) & Co.
Morris & Smith
- MUSKEGON, MICH.
Hulburd, Warren & Chandler
MacCrone (E. E.) & Co.
- MUSKOGEE, OKLA.
Fenner & Beane
- NANTUCKET, MASS.
Auerbach, Pollak & Richardson
- NASHVILLE, TENN.
Clark (Jno. F.) & Co.
Fenner & Beane
- NEWARK, N. J.
Ardis, Warwick & Co.
Bainbridge & Ryan
Beer (H. & B.)
Cassatt & Co.

- Clark, Dodge & Co.
 Dyer, Hudson & Co.
 Eisele & King
 Engel & Co.
 Halle & Stieglitz
 Haupt (Ira) & Co.
 Hirsch, Lilienthal & Co.
 Kaiser (Louis) & Co.
 Kidder, Peabody & Co.
 Lee, Higginson & Co.
 McVickar & Co.
 Orton, Kent & Co.
 Orvis Brothers & Co.
 Post & Flagg
 Prince & Whitely
 Redmond & Co.
 Rothschild (L. F.) & Co.
 Seligsberg & Co.
 Smith, (Edward B.) & Co.
 Tooker & Co.
 Trask (Spencer) & Co.
- NEW BEDFORD, MASS.
 Clark, Childs & Co.
 Tucker, Anthony & Co.
- NEW BERN, N. C.
 Clark (Jno. F.) & Co.
- NEWBERRY, S. C.
 Clark (Jno. F.) & Co.
- NEW BRITAIN, CONN.
 Prince & Whitely
 Putnam & Co.
 Thomson, Fenn & Co.
 Thomson & McKinnon
- NEW BRUNSWICK, N. J.
 Eastman, Dillon & Co.
 McClave & Co.
- NEWBURGH, N. Y.
 Clark, Childs & Co.
 Holmes (J. H.) & Co.
- NEW CASTLE, PA.
 K&Y, Richards & Co.
- NEW HAVEN, CONN.
 Bache (J. S.) & Co.
 Buell & Co.
 Estabrook & Co.
 Hincks Brothers & Co.
- Paine, Webber & Co.
 Prentice & Slepach
 Prince & Whitely
 Scranton (Chas. W.) & Co.
 Thomson, Fenn & Co.
- NEW LONDON, CONN.
 Smith (Edward B.) & Co.
- NEW ORLEANS, LA.
 Beer (H. & B.)
 Bennett (James E.) & Co.
 Blyth & Co.
 Clark (Jno. F.) & Co.
 Fenner & Beane
 Newman Brothers & Worms
 Pierce (E. A.) & Co.
 Post & Flagg
 Rothschild (L. F.) & Co.
- NEWPORT, R. I.
 Morrison & Townsend
 Munds & Winslow
- NEWPORT NEWS, VA.
 Bryan, Kemp & Co.
- NEW ROCHELLE, N. Y.
 Chisholm & Chapman
 Hyman & Co.
- NIAGARA FALLS, N. Y.
 Babcock, Schoellkopf & Co.
 Wright (A. J.) & Co.
- NORFOLK, VA.
 Fenner & Beane
 Livingston & Co.
 Post & Flagg
- NORRISTOWN, PA.
 Seligmann (G. & A.)
- NORTH ADAMS, MASS.
 Goodbody & Co.
- NORTH TONAWANDA, N. Y.
 Babcock, Schoellkopf & Co.
- NORWALK, CONN.
 Pearl & Co.
- NORWICH, CONN.
 Hincks Brothers & Co.
- OAKLAND, CAL.
 Anderson & Fox

- Barneson (H. J.) & Co.
Blyth & Co.
Cavalier (Wm.) & Co.
Hutton (E. F.) & Co.
McDonnell & Co.
Pierce (E. A.) & Co.
Sutro & Co.
Walsh, O'Connor & Co.
- OCEAN CITY, N. J.
McClure, Jones & Co.
- OIL CITY, PA.
Laidlaw & Co.
Logan & Bryan
- OKLAHOMA CITY, OKLA.
Beer (H. & B.)
Bennett (James E.) & Co.
Harriss & Vose
McGreevy & Co.
- OKMULGEE, OKLA.
Fenner & Beane
- OLEAN, N. Y.
O'Brian, Potter & Stafford
- OMAHA, NEB.
Jackson Brothers, Boesel & Co.
Lamson Brothers & Co.
Logan & Bryan
- ORANGEBURG, S. C.
Clark (Jno. F.) & Co.
- ORLANDO, FLA.
Thomson & McKinnon
- OSTERVILLE, MASS.
Paine, Webber & Co.
- OTTAWA, CANADA
Pierce (E. A.) & Co.
- OVERBROOK, PA.
Ristine (F. P.) & Co.
- PARIS, FRANCE
Hayden, Stone & Co.
Hentz (H.) & Co.
- PARIS, TEXAS
Clark (Jno. F.) & Co.
- PARKERSBURG, W. VA.
Hazlett & Burt
Holloway (J. D.) & Co.
- PASADENA, CAL.
Blyth & Co.
Hutton (E. F.) & Co.
Logan & Bryan
Pierce (E. A.) & Co.
- PASSAIC, N. J.
Eisele & King
Gruntal, Lilienthal & Co.
- PATERSON, N. J.
Clark, Dodge & Co.
Goodbody & Co.
Harriman & Co.
Holmes (J. H.) & Co.
Pierce (E. A.) & Co.
- PAWTUCKET, R. I.
Mandeville, Brooks & Chaffee
- PENSACOLA, FLA.
Fenner & Beane
- PEORIA, ILL.
Bennett (James E.) & Co.
Clark (Jno. F.) & Co.
Lamson Brothers & Co.
- PERTH AMBOY, N. J.
Bache (J. S.) & Co.
Chisholm & Chapman
Sutro & Kimbley
- PETERSBURG, VA.
Bryan, Kemp & Co.
- PHILADELPHIA, PA.
Bache (J. S.) & Co.
Barclay, Moore & Co.
Barney (Chas. D.) & Co.
Bean (Chas. H.) & Co.
Biddle (Thos. A.) & Co.
Bioren & Co.
Blyth & Co.
Brown Brothers & Co.
Butcher & Sherrerd
Carstairs & Co.
Cassatt & Co.
Chisholm & Chapman
Clark (E. W.) & Co.
Clucas (E. W.) & Co.
DeHaven & Townsend
de Saint Phalle & Co.
Diffenderffer & Co.

Dixon & Co.
 Drayton, Penington & Colket
 Eastman, Dillon & Co.
 Elkins, Morris & Co.
 Emory, Freed & Co.
 Fridenberg, S. M. & M. S.
 Glendinning (Robt.) & Co.
 Goldman, Sachs & Co.
 Goodbody & Co.
 Green, Ellis & Anderson
 Halle & Stieglitz
 Hano, Wasserman & Co.
 Harrison & Co.
 Harrison, Smith & Co.
 Harriess & Vose
 Hecker & Co.
 Hemphill, Noyes & Co.
 Jenks, Gwynne & Co.
 Jones (C. Clothier) & Co.
 Keech (F. B.) & Co.
 Laird, Bissell & Meeds
 Lee, Higginson & Co.
 Livingston & Co.
 MacDonald & Co.
 MacMeekin & Williamson
 McCreery (Samuel) & Co.
 McGlenn & Co.
 Middleton (M. F.), Jr. & Co.
 Montgomery, Scott & Co.
 Moore, Leonard & Lynch
 Morley, Wood & Co.
 Munds & Winslow
 Murphy (G. M.-P.) & Co.
 Naumburg (E.) & Co.
 Newbold's (W. H.) Son & Co.
 Newburger, Henderson & Loeb
 Orton, Kent & Co.
 Otis & Co.
 Paine, Webber & Co.
 Parrish & Co.
 Pierce (E. A.) & Co.
 Prince (Theodore) & Co.
 Prince & Whitely
 Redmond & Co.
 Ristine (F. P.) & Co.
 Salomon Brothers & Hutzler
 Seligman (J. & W.) & Co.
 Seligmann (G. & A.)

Seymour (Edmund) & Co.
 Sisto (J. A.) & Co.
 Smith (Edward B.) & Co.
 Smith, Graham & Rockwell
 Sparks (J. W.) & Co.
 Sutro Brothers & Co.
 Thomson & McKinnon
 Toland, Trimble & Co.
 Trask (Spencer) & Co.
 West & Co.
 Whelen (Townsend) & Co.
 Winslow, Lanier & Co.
 Wrenn Brothers & Co.
 Wurts, Dulles & Co.

PHOENIX, ARIZ.

Logan & Bryan

PINE BLUFF, ARK.

Clark (Jno. F.) & Co.

PITTSBURGH, PA.

Bennett (James E.) & Co.
 Cassatt & Co.
 Colvin & Co.
 Eastman, Dillon & Co.
 Green, Ellis & Anderson
 Halsey (C. D.) & Co.
 Hemphill, Noyes & Co.
 Hill, Wright & Frew
 Holmes (J. H.) & Co.
 Hornblower & Weeks
 Kay, Richards & Co.
 Lee, Higginson & Co.
 Masten (A. E.) & Co.
 Moore, Leonard & Lynch
 Morris, Brown & Co.
 Nuttall (R. V.) & Co.
 Post & Flagg
 Vockel (S. M.) & Co.
 Wellington & Co.

PITTSFIELD, MASS.

Goodbody & Co.
 Pierce (E. A.) & Co.
 Prentice & Slepach
 Tift Brothers

PITTSSTON, PA.

Eastman, Dillon & Co.

PLAINFIELD, N. J.

Pierce (E. A.) & Co.

PLATTSBURG, N. Y.

Jenks, Gwynne & Co.

POLAND, MAINE

Bear, Stearns & Co.

POLAND SPRINGS, MAINE

Gurnett & Co.

PONCA CITY, OKLA.

Bennett (James E.) & Co.

Fenner & Beane

PONTIAC, MICH.

MacCrone (E. E.) & Co.

PORTCHESTER, N. Y.

Russell, Miller & Co.

PORTLAND, MAINE

Blake Brothers & Co.

Gurnett & Co.

Hayden, Stone & Co.

Hornblower & Weeks

Lee, Higginson & Co.

Paine, Webber & Co.

Tucker, Anthony & Co.

Watson & White

Wrenn Brothers & Co.

PORTLAND, ORE.

Anderson & Fox

Barneson (H. J.) & Co.

Blyth & Co.

Pierce (E. A.) & Co.

Witter (Dean) & Co.

POTTSVILLE, PA.

Eastman, Dillon & Co.

Jones (C. Clothier) & Co.

West & Co.

POUGHKEEPSIE, N. Y.

Livingston & Co.

PROVIDENCE, R. I.

Clark, Childs & Co.

Curtis & Sanger

Davis & Davis

Estabrook & Co.

Harriman & Co.

Harriss & Vose

Hornblower & Weeks

Jackson & Curtis

Keech (F. B.) & Co.

Kidder, Peabody & Co.

Livingston & Co.

Smith, Graham & Rockwell

Trask (Spencer) & Co.

QUEBEC, CANADA

Logan & Bryan

QUINCY, ILL.

Bennett (James E.) & Co.

Lamson Brothers & Co.

RALEIGH, N. C.

Bache (J. S.) & Co.

Barbee & Co.

READING, PA.

Eastman, Dillon & Co.

Jones (C. Clothier) & Co.

Parrish & Co.

Prince & Whitely

West & Co.

RED BANK, N. J.

Appenzellar, Allen & Hill

RICHMOND, VA.

Branch, Cabell & Co.

Branch (Thomas) & Co.

Bryan, Kemp & Co.

Burnet (W. E.) & Co.

Davenport & Co.

Eastman, Dillon & Co.

Fenner & Beane

Iglehart (J. A. W.) & Co.

Murphy (G. M.-P.) & Co.

Scott & Stringfellow

Stein Brothers & Boyce

RIVERHEAD, L. I., N. Y.

Gude, Winmill & Co.

Tobey & Kirk

ROANOKE, VA.

Bryan, Kemp & Co.

ROCHESTER, MINN.

Farnum, Winter & Co.

Harris, Winthrop & Co.

ROCHESTER, N. Y.

Babcock, Schoellkopf & Co.

Bache (J. S.) & Co.

Drayton, Penington & Colket

- Hemphill, Noyes & Co.
 Hibbard, Palmer & Kitchen
 Parrish & Co.
 Perkins (Erickson) & Co.
 Rothschild (L. F.) & Co.
 Smith, Graham & Rockwell
 Sutro Brothers & Co.
 Tucker, Anthony & Co.
 Wright (A. J.) & Co.
- ROCKFORD, ILL.
 Harris, Winthrop & Co.
 Thomson & McKinnon
- ROCKY MOUNT, N. C.
 Bache (J. S.) & Co.
 Fenner & Beane
- RUTLAND, VT.
 Laidlaw & Co.
- RYE, N. Y.
 Harriman & Co.
- SAGINAW, MICH.
 MacCrone (E. E.) & Co.
- ST. GEORGE, S. I., N. Y.
 Chisholm & Chapman
- ST. JOSEPH, MO.
 Farnum, Winter & Co.
- ST. LOUIS, MO.
 Anderson (Lorenzo E.) & Co.
 Anderson (Oliver J.) & Co.
 Benjamin, Hill & Co.
 Bennett (James E.) & Co.
 Brown (Paul) & Co.
 Clark (Jno. F.) & Co.
 Edwards (A. G.) & Sons
 Farnum, Winter & Co.
 Fenner & Beane
 Francis Brother & Co.
 Goldman, Sachs & Co.
 Jackson Brothers, Boesel & Co.
 Knight, Dysart & Gamble
 Lamson Brothers & Co.
 Love, Bryan & Co.
 Mahaffey, (Birch O.)
 Naumburg (E.) & Co.
 Simon (I. M.) & Co.
 Steinberg (Mark C.) & Co.
- Waldheim, Platt & Co.
 Walker (G. H.) & Co.
- ST. PAUL, MINN.
 Bennett (James E.) & Co.
 Farnum, Winter & Co.
 Harris, Winthrop & Co.
 Livingston & Co.
 Paine, Webber & Co.
 Thomson & McKinnon
- ST. PETERSBURG, FLA.
 Thomson & McKinnon
- SALISBURY, N. C.
 Clark (Jno. F.) & Co.
- SAN ANGELO, TEXAS
 Beer (H. & B.)
- SAN ANTONIO, TEXAS
 Bache (J. S.) & Co.
- SAN DIEGO, CAL.
 Blyth & Co.
 Hutton (E. F.) & Co.
 Logan & Bryan
- SAN FRANCISCO, CAL.
 Anderson & Fox
 Barneson (H. J.) & Co.
 Barth (J.) & Co.
 Blyth & Co.
 Cavalier (Wm.) & Co.
 De Wolfe (Chapman) & Co.
 Goldman, Sachs & Co.
 Hutton (E. F.) & Co.
 Logan & Bryan
 McDonnell & Co.
 Pierce (E. A.) & Co.
 Russell, Miller & Co.
 Strassburger & Co.
 Sutro & Co.
 Walsh, O'Connor & Co.
 Witter (Dean) & Co.
- SAN JOSE, CAL.
 Hutton (E. F.) & Co.
- SANTA BARBARA, CAL.
 Hutton (E. F.) & Co.
 Logan & Bryan
- SAVANNAH, GA.
 Hentz (H.) & Co.

- SCHENECTADY, N. Y.
Bache (J. S.) & Co.
Foster & Adams
Maynard, Oakley & Lawrence
Smith (Edward B.) & Co.
- SCRANTON, PA.
Brooks (J. H.) & Co.
Cassatt & Co.
Cusick (P. F.) & Co.
Dyer, Hudson & Co.
Eastman, Dillon & Co.
Hemphill, Noyes & Co.
Tucker, Anthony & Co.
- SEATTLE, WASH.
Anderson & Fox
Barneson (H. J.) & Co.
Blyth & Co.
Logan & Bryan
Pierce (E. A.) & Co.
Witter (Dean) & Co.
- SELMA, ALA.
Fenner & Beane
- SHABBONA, ILL.
Harris, Winthrop & Co.
- SHAMOKIN, PA.
Jones (C. Clothier) & Co.
- SHAWNEE, OKLA.
Beer (H. & B.)
- SHELBY, N. C.
Clark (Jno. F.) & Co.
- SHERMAN, TEXAS
Clark (Jno. F.) & Co.
- SHREVEPORT, LA.
Beer (H. & B.)
Fenner & Beane
- SIOUX CITY, IOWA
Bennett (James E.) & Co.
Lamson Brothers & Co.
- SOUTHAMPTON, L. I., N. Y.
Auerbach, Pollak & Richardson
Gammack & Co.
Morrison & Townsend
Wade Brothers & Co.
- SOUTH BEND, IND.
Harris, Winthrop & Co.
- Lowitz (E.) & Co.
Thomson & McKinnon
- SPARTANBURG, S. C.
Post & Flagg
- SPOKANE, WASH.
Blyth & Co.
Logan & Bryan
- SPRINGFIELD, ILL.
Jackson Brothers, Boesel & Co.
- SPRINGFIELD, MASS.
Estabrook & Co.
Goodbody & Co.
Hayden, Stone & Co.
Jackson & Curtis
Lage & Co.
Lee, Higginson & Co.
Paine, Webber & Co.
Tift Brothers
- SPRING LAKE, N. J.
Thomson & McKinnon
- SPRING LAKE BEACH, N. J.
Meehan (M. J.) & Co.
- STAMFORD, CONN.
Pearl & Co.
Wade Brothers & Co.
- STAUNTON, VA.
Bryan, Kemp & Co.
- STEUBENVILLE, OHIO
Hazlett & Burt
- STORM LAKE, IOWA
Bennett (James E.) & Co.
Lamson Brothers & Co.
- STREATOR, ILL.
Bennett (James E.) & Co.
- SUMMIT, N. J.
de Saint Phalle & Co.
- SUNBURY, PA.
Harrison, Smith & Co.
- SWAMPSCOTT, MASS.
Hamlin (E. M.) & Co.
- SYRACUSE, N. Y.
Bache (J. S.) & Co.
Clark, Childs & Co.
Drayton, Penington & Colket
Dyer, Hudson & Co.

- Foster & Adams
 Hemphill, Noyes & Co.
 Paine, Webber & Co.
 Sutro Brothers & Co.
 Tucker, Anthony & Co.
 Wright (A. J.) & Co.
- TACOMA, WASH.
 Blyth & Co.
 Logan & Bryan
 Pierce (E. A.) & Co.
 Witter (Dean) & Co.
- TAMPA, FLA.
 Thomson & McKinnon
- TARBORO, N. C.
 Clark (Jno. F.) & Co.
- TERRE HAUTE, IND.
 Bennett (James E.) & Co.
- TEXARKANA, TEXAS
 Fenner & Beane
- TITUSVILLE, PA.
 Laidlaw & Co.
- TOLEDO, OHIO
 Bache (J. S.) & Co.
 Bell & Beckwith
 Collin, Norton & Co.
 Hulburd, Warren & Chandler
 Hutton (W. E.) & Co.
 Jackson Brothers, Boesel & Co.
 Lamson Brothers & Co.
 Otis & Co.
 Snyder, Wilson & Co.
- TORONTO, CANADA
 Dyer, Hudson & Co.
 Hemphill, Noyes & Co.
 Laidlaw & Co.
 Logan & Bryan
 Pierce (E. A.) & Co.
 Thomson & McKinnon
 Timmins (J. R.) & Co.
 Wright (A. J.) & Co.
- TORRINGTON, CONN.
 Morrison & Townsend
- TRENTON, N. J.
 Eastman, Dillon & Co.
 Eisele & King
- TROY, N. Y.
 Bache (J. S.) & Co.
 Joost, Patrick & Co.
- TULSA, OKLA.
 Bache (J. S.) & Co.
 Fenner & Beane
 Francis Brother & Co.
 McGreevy & Co.
 Wollman (W. J.) & Co.
- TUPELO, MISS.
 Beer (H. & B.)
- UNION CITY, N. J.
 Carreau & Snedeker
- UNIONTOWN, PA.
 Kay, Richards & Co.
 Moore, Leonard & Lynch
- UPPER DARBY, PA.
 Jones (C. Clothier) & Co.
- UPPER SARANAC, N. Y.
 Thomson & McKinnon
- UTICA, N. Y.
 Bache (J. S.) & Co.
 Drayton, Penington & Colket
 Foster & Adams
- VANCOUVER, B. C.
 Blyth & Co.
 Logan & Bryan
 Pierce (E. A.) & Co.
- VICHY, FRANCE
 Hentz (H.) & Co.
- VINEYARD HAVEN, MASS.
 Auerbach, Pollak & Richardson
- VIRGINIA BEACH, VA.
 Post & Flagg
- WACO, TEXAS
 Fenner & Beane
- WALLA WALLA, WASH.
 Logan & Bryan
- WARREN, OHIO
 Butler, Beadling & Co.
- WARREN, PA.
 Kay, Richards & Co.

WARRENTON, VA.

Wright, Slade & Co.

WASHINGTON, D. C.

Clark, Childs & Co.

Eastman, Dillon & Co.

Fenner & Beane

Harriman & Co.

Harriss & Vose

Hibbs (W. B.) & Co.

Iglehart (J. A. W.) & Co.

Keech (F. B.) & Co.

Lanahan (W. W.) & Co.

Meehan (M. J.) & Co.

Murphy (G. M.-P.) & Co.

Pierce (E. A.) & Co.

Seligman (J. & W.) & Co.

Stein Brothers & Boyce

Westheimer & Co.

Wright, Slade & Co.

WASHINGTON, PA.

Mitchell, Tucker & Co.

WATCH HILL, R. I.

Rhoades & Co.

WATERBURY, CONN.

Boody, McLellan & Co.

Hincks Brothers & Co.

Pearl & Co.

WATERLOO, IOWA.

Bennett (James E.) & Co.

Lamson Brothers & Co.

WATERTOWN, N. Y.

Bache (J. S.) & Co.

Foster & Adams

WATSEKA, ILL.

Bennett (James E.) & Co.

WELDEN, N. C.

Clark (Jno. F.) & Co.

WEST END, N. J.

Cohn (Laurence) & Co.

Content (H.) & Co.

Fahy (Walter J.) & Co.

Lipper (Arthur) & Co.

Weisl (Edwin) & Co.

WESTFIELD, N. J.

Ristine (F. P.) & Co.

WESTHAMPTON BEACH, L. I., N. Y.

Fahy (Walter J.) & Co.

WHEELING, W. VA.

Hazlett & Burt

Holloway (J. D.) & Co.

Masten (A. E.) & Co.

Merriman, John D.

Mitchell, Tucker & Co.

WHITE PLAINS, N. Y.

Chisholm & Chapman

Haupt (Ira) & Co.

Meehan (M. J.) & Co.

Rothschild (L. F.) & Co.

Trask (Spencer) & Co.

WHITE SULPHUR SPRINGS, W. VA.

Harris, Winthrop & Co.

WICHITA, KANSAS

Bennett (James E.) & Co.

McGreevy & Co.

WICHITA FALLS, TEXAS

Clark (Jno. F.) & Co.

WILKES-BARRE, PA.

Brooks (J. H.) & Co.

Cassatt & Co.

Cusick (P. F.) & Co.

Dyer, Hudson & Co.

Green, Ellis & Anderson

Iglehart (J. A. W.) & Co.

WILLIAMSPORT, PA.

Brooks (J. H.) & Co.

Cassatt & Co.

West & Co.

WILMINGTON, DEL.

Ardis, Warwick & Co.

Clark (E. W.) & Co.

Dyer, Hudson & Co.

Harriman & Co.

Hemphill, Noyes & Co.

Iglehart (J. A. W.) & Co.

Laird, Bissell & Meeds

Welles (C. E.) & Co.

WILMINGTON, N. C.

Fenner & Beane

WINNIPEG, CANADA

Logan & Bryan

WINSTON-SALEM, N. C.
 Bache (J. S.) & Co.
 Barney (Chas. D.) & Co.
 Clark (Jno. F.) & Co.
 Fenner & Beane
 Stein Brothers & Boyce

WOONSOCKET, R. I.
 Mandeville, Brooks & Chaffee

WORCESTER, MASS.
 Bache (J. S.) & Co.
 Estabrook & Co.
 Jackson & Curtis
 Lee, Higginson & Co.
 Paine, Webber & Co.
 Trask (Spencer) & Co.

YONKERS, N. Y.
 Chisholm & Chapman
 Gruntal, Lilienthal & Co.
 McVicker & Co.
 Redmond & Co.

YORK, PA.
 Cassatt & Co.
 Clark (E. W.) & Co.
 West & Co.

YOUNGSTOWN, OHIO
 Butler, Beadling & Co.
 Wick & Co.

ZANESVILLE, OHIO
 Ungerleider (Samuel) & Co.

NEW YORK STOCK EXCHANGE FIRMS MAINTAINING OFFICES ON STEAMSHIPS

S. S. ILE DE FRANCE
 de Saint Phalle & Co.
 S. S. LEVIATHAN
 Meehan (M. J.) & Co.

S. S. MAJESTIC
 de Saint Phalle & Co.

APPENDIX C

MEMBER FIRMS OF OUTSIDE EXCHANGES

SECTION I

REGISTERED FIRMS OF THE NEW YORK CURB EXCHANGE

Original List as of July, 1929

Abraham & Co. 120 Broadway	Boldtmann & Co. 120 Broadway
Abrahams, Hoffer & Co. 29 Broadway	Bonham & Westendorf 30 Broad St.
Adams, S. G. & Co. 45 Wall St.	Brandenburg & Co. 111 Broadway
Adamson & O'Brien 25 Broad St.	Brickman, Landsberg & Co. 25 Broad St.
Adler, Coleman & Co. 15 Broad St.	Browning, O. F. & Son 74 Trinity Place
Andrews, Posner & Rothschild 26 Broadway	Buck & Co. 20 Broad St.
	Burnet, W. E. & Co. 11 Wall St.
Bache, J. S. & Co. 42 Broadway	Byck & Lowenfels 50 Broadway
Baker, E. A. & Son 30 Broad St.	
Bamberger, Loeb & Co. 42 Broadway	Callaway, Fish & Co. 15 Broad St.
Banks, W. S. & Co. 25 Broad St.	Campbell, Starring & Co. 52 Wall St.
Banner & Co. 39 Broadway	Campbell, S. S. & Co. 74 Trinity Place
Barnes, R. W. P. & Co. 165 Broadway	Carleton & Mott 170 Broadway
Barney, Chas. D. & Co. 65 Broadway	Carpenter, Cutler & Co. 52 Broadway
Barton & Barton 52 Broadway	Chapin, S. B. & Co. 111 Broadway
Bear, Stearns & Co. 100 Broadway	Chater & Edey 30 Broad St.
Berdell Brothers 39 Broadway	Chisholm & Chapman 52 Broadway
Block, Maloney & Co. 50 Broadway	Churchill & Co. 111 Broadway
Bogert, Beverley & Co. 120 Broadway	Clark, Childs & Co. 120 Broadway

Clark, Dodge & Co. 61 Wall St.	Farnum, Winter & Co. 141 Broadway
Clement, Curtis & Co. 231 So. La Salle St., Chicago, Ill.	Farr & Co. 90 Wall St.
Coady, Beinecke & Co. 60 Broad St.	Fetzer & Emmons 120 Broadway
Coleman & Reitze 50 Broad St.	Filor, Bullard & Smyth 39 Broadway
Coles, W. C. & Co. 52 Broadway	Fisk, Harvey & Sons 120 Broadway
Colvin & Co. 35 Wall St.	Foster & Adams 120 Broadway
Cusick, P. F. & Co. 44 Wall St.	Friedmann & Torney 150 Broadway
Dates & Dyer 11 Broadway	Gardner & Co. 20 Broad St.
Davis, J. W. & Co. 111 Broadway	Gilligan, J. & Co. 30 Broad St.
Dickinson, Maguire & Paul 149 Broadway	Goldberg, H. L. & Co. 74 Trinity Place
Dominick & Dominick 115 Broadway	Goldman, Sachs & Co. 30 Pine St.
Donovan, J. A. & Co. 29 Broadway	Goodbody & Co. 115 Broadway
Dunne, John V. & Co. 30 Broad St.	Gould, Avery & Co. 39 Broadway
Dyer, Hudson & Co. 61 Broadway	Gray & Wilmerding 5 Nassau St.
Eastman, Dillon & Co. 120 Broadway	Griebel, Nordhouse & Co. 25 Broad St.
Edmonds & Pentz 26 Broadway	Gude, Winmill & Co. 11 Wall St.
Eglinton, A. Lincoln & Co. 29 Broadway	Hale, Waters & Co. Sears Bldg., Boston, Mass.
Einstein, H. G. & Co. 42 Broadway	Halle & Stieglitz 25 Broad St.
Emanuel & Co. 32 Broadway	Hallgarten & Co. 44 Pine St.
English & Schryver 74 Trinity Place	Hallock & Perry 71 Broadway
Eric & Drevers 115 Broadway	Halsey, C. D. & Co. 43 Broad St.
Fahnestock & Co. 63 Wall St.	Halsted & Harrison 71 Broadway
	Harriman & Co. 111 Broadway

- Harris, Winthrop & Co.
11 Wall St.
- Hartshorne, Fales & Co.
71 Broadway
- Hayden, Stone & Co.
25 Broad St.
- Hayman & Hayman
30 Broad St.
- Hedberg & Re
30 Broad St.
- Heinemann, E. & Co.
39 Broadway
- Heller & Levenson
44 Wall St.
- Hemphill, Noyes & Co.
15 Broad St.
- Hendrickson & Co.
61 Broadway
- Herzog & Glazier
24 Broad St.
- Hoffman & Blum
49 Broadway
- Hoffman, William P. & Co.
39 Broadway
- Hollander, L. A. & Co.
120 Broadway
- Holmes, J. H. & Co.
120 Broadway
- Hornblower & Weeks
42 Broadway
- Hutton, E. F. & Co.
61 Broadway
- Hutton, W. E. & Co.
52 Wall St.
- Hyman, Jesse & Co.
50 Broad St.
- Jackson, J. E. & Co.
74 Trinity Place
- Jackson & Curtis
115 Broadway
- Jelke, Frazier & Co.
25 Pine St.
- Jenks, Gwynne & Co.
30 Broad St.
- Jesup & Lamont
26 Broadway
- Jewett, Pierce & Shean
25 Broad St.
- Johnson, Tierney & Freeman
68 Trinity Place
- Johnson & Wood
120 Broadway
- Josephthal & Co.
120 Broadway
- Judis, Chester D. & Co.
25 Broadway
- Kean, Taylor & Co.
5 Nassau St.
- Keech, F. B. & Co.
52 Broadway
- Kerr, C. C. & Co.
111 Broadway
- Kimmelberg, W. E. & Co.
105 Liberty St.
- Koch, Spencer B. & Co.
39 Broadway
- Kohn & Co.
74 Trinity Place
- Ladenburg, Thalmann & Co.
25 Broad St.
- Laidlaw & Co.
26 Boardway
- Laird, Bissell & Meeds
120 Broadway
- Langley, W. C. & Co.
115 Broadway
- Lawson, Peter R. & Co.
25 Broad St.
- Lazard Freres
120 Broadway
- Leahy Brothers
150 Broadway
- Leff Brothers
25 Broad St.
- Lehman Brothers
1 William St.
- Levy Brothers
42 Broadway
- Libaire & Co.
37 Wall St.
- Lindley & Co.
52 Broadway
- Lipper, Arthur & Co.
50 Broad St.

Livingston & Co.
111 Broadway
Lober Brothers & Plaut
37 Wall St.
Locke, Andrews & Pierce
74 Trinity Place
Logan & Bryan
42 Broadway
Lord & Widli
14 Wall St.
Louchheim, Minton & Co.
111 Broadway
Ludwig, Robertson & Co.
25 Broad St.
Luke, Banks & Weeks
14 Wall St.
Lynch & Co.
33 Broadway

Mackay & Co.
14 Wall St.
Maddox & Gimbernat
2 Rector St.
Manesse & Co.
37 Wall St.
Manowitch Brothers
50 Broadway
Marsalis, Thomas & Co.
115 Broadway
Marqusee, Gerald & Co.
74 Trinity Place
Mathey, L. A. & Co.
37 Wall St.
McCaffray, Walter P. & Co.
30 Broad St.
McClure, Jones & Co.
115 Broadway
McConnell, H. F. & Co.
150 Broadway
McCormack, J. L. & Co.
39 Broadway
McCormack, W. A. & Co.
2 Rector St.
McDermott, Peter P. & Co.
42 Broadway
McDonnell & Co.
120 Broadway
McDowell & Herdling
150 Broadway

McGough & Schuman
50 Broadway
McSherry, Vincent R. & Co.
2 Rector St.
Meehan, M. J. & Co.
61 Broadway
Meinken, E. F. & Co.
74 Trinity Place
Mendels, E. S., Jr. & Co.
29 Broadway
Merrill, Lynch & Co.
120 Broadway
Miller & Bowler
26 Broadway
Moffatt & Spear
44 Broad St.
Moore & Schley
100 Broadway
Morgenthau, John L. & Co.
2 Rector St.
Moxley & Hall
42 Broadway
Muller, Wm. S. & Co.
74 Trinity Place
Murphy, G. M. P. & Co.
52 Broadway

Nash & Co.
111 Broadway
Nelson, Thomas F. & Co.
61 Broadway
Newborg & Co.
60 Broadway
Newburger, Henderson & Loeb
100 Broadway

Oliphant, J. H. & Co.
61 Broadway
Oppenheimer & Co.
74 Trinity Place
Orr, Van Dyne & Krech
61 Broadway
Otis & Co.
15 Nassau St.

Paine, Webber & Co.
25 Broad St.
Parrish & Co.
25 Broadway

- Pask & Walbridge
14 Wall St.
- Perkins, Erickson & Co.
Powers Bldg., Rochester, N. Y.
- Perls, Martin & Co.
70 Wall St.
- Pforzheimer, Carl H. & Co.
25 Broad St.
- Phelps, Fenn & Co.
39 Broadway
- Pierce, E. A. & Co.
11 Wall St.
- Piperno & Co.
53 Exchange Place
- Place, Walter S. & Co.
42 Broadway
- Platte & Fransioli
39 Broadway
- Post & Flagg
49 Broad St.
- Pouch & Co.
14 Wall St.
- Prince, Theodore & Co.
120 Broadway
- Prince & Whitely
25 Broad St.
- Pynchon & Co.
111 Broadway
- Quaw & Foley
30 Broad St.
- Reiner, Milton E. & Co.
74 Trinity Place
- Reinhart & Bennet
52 Broadway
- Richards, Dunn & Co.
26 Broadway
- Rockwell & Kerr
74 Trinity Place
- Rosenthal, Arthur J. & Co.
111 Broadway
- Rothschild, L. F. & Co.
120 Broadway
- Russell, Miller & Co.
50 Broadway
- Salisbury & Co.
16 Exchange Place
- Schroeder, G. G. & Co.
2 Rector St.
- Seligsgberg & Co.
50 Broad St.
- Shearson, Hammill & Co.
71 Broadway
- Shipman, John C. & Co.
49 Broadway
- Smith, Edward B. & Co.
15 Broad St.
- Smith & Gallatin
115 Broadway
- Smithers, F. S. & Co.
15 Broad St.
- Sparks, J. W. & Co.
50 Broadway
- Steele, I. W. & Co.
34 State St., Rochester, N. Y.
- Steiner, Rouse & Strook
25 Broad St.
- Steinhardt & Co.
39 Broadway
- Stewart, J. J. & Co.
50 Broad St.
- Streicher, J. & Co.
2 Rector St.
- Sullivan, Jerome B. & Co.
42 Broadway
- Sulzbacher, Granger & Co.
111 Broadway
- Sutro Brothers & Co.
120 Broadway
- Taylor, Bates & Co.
48 Wall St.
- Thomson & McKinnon
11 Wall St.
- Titus & Co.
149 Broadway
- Tobey & Kirk
25 Broad St.
- Toerge & Schiffer
15 Broad St.
- Tracy, Willis & Richardson
25 Broad St.
- Trask, Spencer & Co.
25 Broad St.
- Tucker, Anthony & Co.
120 Broadway

Tully, Monteith & Mitchell 52 Broadway	Wertheim & Co. 57 William St.
Turnbull & Co. 150 Broadway	West & Co. 63 Wall St.
	White, Weld & Co. 14 Wall St.
Uhlmann & Neuman 50 Broad St.	Whiting, E. H. & Co. 32 Broadway
	Whitney, Richard & Co. 15 Broad St.
Vanderhoef & Robinson 63 Wall St.	Williams, Mackenzie & Co. 115 Broadway
Vilas & Hickey 49 Wall St.	Winslow, Lanier & Co. 49 Wall St.
	Wisner & Co. 26 Broadway
Wachsman & Wassall 120 Broadway	Wollman, W. J. & Co. 120 Broadway
Wagner, Stott & Co. 74 Trinity Place	Wright & Sexton 30 Broad St.
Wales, Williamson & Co. 149 Broadway	
Walsh & Co. 115 Broadway	Yachnin, Irving & Co. 39 Broadway
Warwick, D. B. & Co. 115 Broadway	Young & Co. 74 Trinity Place
Watson & White 149 Broadway	
Weingarten & Fechheimer 2 Rector St.	Zoline & Co. 37 Wall St.

SECTION II

LIST OF FIRM MEMBERS OF THE CHICAGO STOCK EXCHANGE

Original List as of October 11, 1929

Anderson, Oliver J. & Co. 718 Locust St., St. Louis	Baur, A. C. & Co. 120 So. La Salle
Babcock, Rushton & Co. 137 So. La Salle	Bennett, James E. & Co. 332 So. La Salle
Bache, J. S. & Co. 231 So. La Salle	Block, Maloney & Co. 50 Broadway, New York
Baker, Alfred L. & Co. 141 So. La Salle	Blyth & Co. 105 So. La Salle
Barneson, H. J. & Co. 256 Montgomery St., San Francisco	Bosworth, Chanute, Loughridge & Co. Security Bldg., Denver
Bard & Co. 105 So. La Salle	Bulger, J. F. & Co. 332 So. La Salle

- Chapin, S. B. & Co.
209 So. La Salle
- Clark, Childs & Co.
120 Broadway, New York
- Cleary & Co.
120 So. La Salle
- Clement, Curtis & Co.
231 So. La Salle
- Colvin & Co.
39 So. La Salle
- Cooke, James L. & Co.
231 So. La Salle
- Davis, Paul H. & Co.
37 So. La Salle
- Ditt, Paul C. & Co.
120 So. La Salle
- Eastman, Dillon & Co.
104 So. La Salle
- Edwards, A. G. & Sons
412 Olive St., St. Louis
- Fairman, Johns & Co.
208 So. La Salle
- Farnum, Winter & Co.
120 So. La Salle
- Faroll Brothers
231 So. La Salle
- Francis Brother & Co.
4th & Olive Sts., St. Louis
- Hallgarten & Co.
120 So. La Salle
- Hamill, James T. & Co.
Continental Bank Bldg., Indianapolis
- Harrison, A. H. & Co.
120 So. La Salle
- Harris, Winthrop & Co.
209 So. La Salle
- Heinzelman, K. J. & Co.
120 So. La Salle
- Hill (Alfred) & Co.
5th & Walnut Sts., Cincinnati
- Hopwood & Co.
529 2nd Ave. So., Minneapolis
- Hornblower & Weeks
39 So. La Salle
- Hulburd, Warren & Chandler
208 So. La Salle
- Jackson & Curtis
115 Broadway, New York
- Jackson Brothers, Boesel & Co.
332 So. La Salle
- Jelke (Frazier) & Co.
112 W. Adams
- Keech, F. B. & Co.
231 So. La Salle
- Kempner Brothers & Co.
166 W. Jackson Blvd.
- Kissel, Kinnicutt & Co.
120 W. Adams
- Knight, Dysart & Gamble
401 Olive St., St. Louis
- Lage & Co.
105 W. Adams
- Laidlaw & Co.
26 Broadway, New York
- Lamborn, Hutchings & Co.
231 So. La Salle
- Lampert, H. H. & Co.
208 So. La Salle
- Lamson Brothers & Co.
166 W. Jackson Blvd.
- Lawton, S. & Co.
120 So. La Salle
- Lee, Higginson & Co.
209 So. La Salle
- Lehman Brothers
16 William St., New York
- Lester, Carter & Co.
209 So. La Salle
- Lewis & Co.
Lewis Bldg., Minneapolis
- Livingston & Co.
111 Broadway, New York
- Lober Brothers & Plaut
37 Wall St., New York
- Logan & Bryan
105 W. Adams
- Lowitz, E. & Co.
129 So. La Salle

- Maynard, H. H. & Co.
120 So. La Salle
- Merrill, Lynch & Co.
105 W. Adams
- Mills, W. S. & Co.
120 So. La Salle
- Minturn, Benjamin E. & Co.
39 So. La Salle
- Mitchell, Hutchins & Co.
231 So. La Salle
- Molloy & Gross
120 So. La Salle
- Molyneaux, T. F. & Co.
332 So. La Salle
- Montgomery, Scott & Co.
123 So. Broad St., Philadelphia
- Morrison & Townsend
208 So. La Salle
- Moses, Wheeler & Scheinman
120 So. La Salle
- MacCrone, E. E. & Co.
Penobscot Bldg., Detroit
- McDonald, Frank E. & Co.
120 So. La Salle
- McGreevy & Co.
924 Baltimore, Kansas City
- McMillan, W. B. & Co.
120 So. La Salle
- Nicol-Ford & Co.
Ford Bldg., Detroit
- Norris & Kenly
208 So. La Salle
- Noyes, David A. & Co.
208 So. La Salle
- Oliphant, Jas. H. & Co.
209 So. La Salle
- Otis & Co.
111 W. Adams
- Paddleford & Lamy
208 So. La Salle
- Paine, Webber & Co.
209 So. La Salle
- Perrill (Alger) & Co.
231 So. La Salle
- Peterson & Roche
209 So. La Salle
- Pierce, E. A. & Co.
105 W. Adams
- Prince, F. H. & Co.
Court & Washington Sts., Boston
- Prince & Whitely
208 So. La Salle
- Pynchon & Co.
112 W. Adams
- Richards & Co.
37 Wall St., New York
- Rodger, Pribble & Co.
120 So. La Salle
- Rothschild & Co.
105 W. Adams
- Russell, Brewster & Co.
112 W. Adams
- Sadler, Patton & Co.
120 So. La Salle
- Schlachman (Max) & Co.
120 So. La Salle
- Schuberth, Wm. A. & Co.
120 So. La Salle
- Scott, Burrows & Christie
208 So. La Salle
- Seaverns & Co.
208 So. La Salle
- Shearson, Hammill & Co.
200 So. La Salle
- Sincere (Charles) & Co.
231 So. La Salle
- Slaughter, A. O. & Co.
120 So. La Salle
- Smart, R. H. & Co.
208 So. La Salle
- Stein, Alstrin & Co.
211 So. La Salle
- Steinberg, Mark C. & Co.
Boatmen's Bank Bldg., St. Louis
- Stern & Lowitz
160 Broadway, New York
- Sutro Brothers & Co.
120 Broadway, New York
- Swift, Langill & Henke
137 So. La Salle

Thomson & McKinnon
209 So. La Salle

Trask (Spencer) & Co.
208 So. La Salle

Trumbull, Wardell & Co.
105 W. Adams

Walker, G. H. & Co.
Broadway & Locust St., St. Louis

Webster, Marsh & Co.
209 So. La Salle

Weinress (Morton) & Co.
231 So. La Salle

White, Weld & Co.
134 So. La Salle

Wollman, W. J. & Co.
120 Broadway, New York

Zeiler, F. M. & Co.
209 So. La Salle

SECTION III

MEMBER FIRMS OF THE SAN FRANCISCO STOCK EXCHANGE WITH MAIN SAN FRANCISCO OFFICES

Original List as of April 30, 1929

W. W. Adams & Co.
Merchants Exchange Bldg.

Alanson Brothers & Co.
Kohl Bldg.

Anderson & Fox
317 Montgomery St.

Brayton, Cutler & Cooke
247 Montgomery St.

H. J. Barneson & Co.
256 Montgomery St.

J. Barth & Co.
482 California St.

Edwin D. Berl
256 Montgomery St.

Robert C. Bolton & Co.
Kohl Bldg.

Boren, Howell & Wood
428 Russ Bldg.

Wm. Cavalier & Co.
Insurance Exchange Bldg.

Curran & Dwyer
Kohl Bldg.

Davis, Skaggs & Co.
111 Sutter St.

Chapman De Wolfe & Co.
351 Montgomery St.

Duisenberg-Wichman & Co.
35 Post St.

Albert L. Ehrman
519 California St.

Filmer, Bradford & Maxwell
37 Montgomery St.

Freeman-Parrish & Co.
315 Montgomery St.

Gorman, Kayser & Co.
121 Sutter St.

Grimes & Swift
500 Financial Center Bldg.

Hellmann-Wade & Co.
517 California St.

Hendrickson, Shuman & Co.
Russ Bldg.

Holt & Richey
412 Hunter-Dulin Bldg.

Sidney P. Kahn
482 California St.

F. B. Keyston Co.
315 Montgomery St.

Max I. Koshland & Co.
Suite 12, Mills Bldg.

Leib, Keyston & Co.
50 Post St.

Lilienthal-Bremer & Co.
211 Montgomery St.
Logan & Bryan
401 Montgomery St.
Lundborg, Coleman & Stever
Kohl Bldg.

Manheim, Dibbern & Co.
485 California St.
McCreery, Finnell & Co.
111 Montgomery St.
McDonnell & Co.
633 Market St.
McNear & Co.
362 Russ Bldg.
J. J. Meigs & Co.
315 Montgomery St.

Newell, Murdoch, Railey & Co.
1050 Russ Bldg.
L. H. Norris & Son
425-429 Pine St.

E. A. Pierce & Co.
301 Montgomery St.
Plunkett-Lilienthal & Co.
232 Montgomery St.

Edward Pollitz & Co.
1821 Russ Bldg.

Carl Raiss & Co.
256 Montgomery St.
Howard G. Park
401 Russ Bldg.
Russell-Colvin & Co.
Mills Bldg.
Ryone & Co.
315 Montgomery St.

Frank C. Shaughnessy & Co.
315 Montgomery St.
Shingle, Brown & Co.
440 Montgomery St.
Lawrence J. Steinhardt & Co.
Russ Bldg.
Strassburger & Co.
133 Montgomery St.
Sutro & Co.
407 Montgomery St.

Walsh, O'Connor & Co.
225 Montgomery St.
Wardell, Bacon & Co.
2801 Russ Bldg.
Dean Witter & Co
Kohl Bldg.

OTHER OFFICES OF SAN FRANCISCO STOCK EXCHANGE MEMBERS

Anderson & Fox
Los Angeles, Calif.
Beverly-Wilshire Hotel Office
Title Insurance Bldg., 443 So.
Spring St.
New York, N. Y.
43 Broad St.
Equitable Trust Bldg., 347 Madison Ave.
Oakland, Calif., Central Bank Bldg.
Portland, Ore., 309 Stark St.
San Francisco, Calif., St. Francis Hotel

Bacon & Brayton
Hollywood, Calif., 6406 Hollywood Blvd.
Los Angeles, Calif., 416 Pacific Southwest Bldg.
H. J. Barneson & Co.
Hollywood, Calif., 6427 Hollywood Blvd.
Los Angeles, Calif., 111 West 7th St.
New York, N. Y., Standard Oil of N. Y. Bldg., 26 Broadway
Oakland, Calif., 407 15th St.

- Portland, Ore., 320 Stark St.
 San Francisco, Calif.
 570 Green St.
 465 Montgomery St.
 Seattle, Wash., 711 Second Ave.
 †Bond & Goodwin & Tucker, Inc.
 Eugene, Ore., Bank of Commerce Bldg.
 Fresno, Calif., 708 T. W. Patterson Bldg.
 Long Beach, Calif., 1204 Security Bldg.
 Los Angeles, Calif., 458 So. Spring St.
 New York, N. Y., Rm. 2706, 20 Pine St.
 Oakland, Calif., 310 Central Bank Bldg.
 Pasadena, Calif., 716 Pacific Southwest Bldg.
 Pomona, Calif., First National Bank Bldg.
 Portland, Ore., 333 U. S. National Bank Bldg.
 Riverside, Calif., 306 Citizens National Bank Bldg.
 Sacramento, Calif., 802 Capital National Bank Bldg.
 San Diego, Calif., 817 J. D. Spreckels Bldg.
 San Pedro, Calif., 212 Bank of San Pedro Bldg.
 Seattle, Wash., 405 Hoge Bldg.
 Spokane, Wash., 1117 Old National Bank Bldg.
 Tacoma, Wash., 714 Washington Bldg.
 Wm. Cavalier & Co.
 Berkeley, Calif., American Trust Co. Bldg.
 Los Angeles, Calif., 650 So. Spring St.
 Oakland, Calif., 360 14th St.
 Duisenberg-Wichman & Co.
 Honolulu, H. I., 115 Merchant St.
 Freeman-Parrish & Co.
 San Jose, Calif., First National Bank Bldg.
 Gorman, Kayser & Co.
 Eureka, Calif.
 Fresno, Calif.
 Hollywood, Calif.
 Los Angeles, Calif.
 Oakland, Calif.
 Leib, Keyston & Co.
 Los Angeles, Calif., Pacific Mutual Bldg.
 San Francisco, Calif.
 235 Columbus Ave.
 1729 Fillmore St.
 3052 16th St.
 Lilienthal, Bremer & Co.
 Los Angeles, Calif., 921 Hellman Bank Bldg.
 Logan & Bryan
 Head Office: New York, N. Y., 42 . Broadway
 Beverly Hills, Calif.
 Butte, Mont.
 Chicago, Ill.
 Bankers Bldg.
 Congress Hotel
 Coronado Beach, Calif.
 Duluth, Minn.
 331 W. Superior St.
 Board of Trade
 French Lick, Ind.
 Grand Rapids, Mich.
 Hollywood, Calif.
 Hot Springs, Va.
 Long Beach, Calif.
 Los Angeles
 Biltmore Hotel
 636 So. Spring St.
 Minneapolis, Minn.
 Montreal, Canada
 New York, N. Y., Produce Exchange
 Oil City, Pa.
 Omaha, Neb.
 Palm Springs, Calif.
 Pasadena, Calif.

- Quebec, Canada
 San Diego, Calif.
 San Francisco, Calif., Crocker Bank Bldg.
 Santa Barbara, Calif.
 1016 State Street
 Biltmore Hotel
 Seattle, Wash.
 705 Third Ave.
 Olympic Hotel
 Great Northern Bldg.
 Spokane, Wash.
 Tacoma, Wash.
 Toronto, Canada
 Vancouver, B. C.
 West Baden, Ind.
 Winnipeg, Canada
 Manheim, Dibbern & Co.
 Grass Valley, Calif.
 McDonnell & Co.
 Head Office: New York, N. Y., 120 Broadway
 Asbury Park, N. J.
 New York, N. Y.
 Produce Exchange
 29 East 53rd St.
 Oakland, Calif., 436 17th St.
 San Francisco, Calif., Financial Center Bldg.
 J. J. Meigs & Co.
 Sacramento, Calif., Capital National Bank Bldg.
 Stockton, Calif., Bank of Italy Bldg.
 †Peirce, Fair & Co.
 Los Angeles, Calif., 639 So. Spring St.
 Portland, Ore., U. S. National Bank Bldg.
 Seattle, Wash, Hoge Bldg.
 E. A. Pierce & Co.
 Head Office: New York, N. Y., 11 Wall St.
 Buffalo, N. Y.
 Chicago, Ill.
 105 West Adams St.
 164 N. La Salle St.
 1425 S. Racine
 Columbia, S. C.
 Dallas, Texas
 Greensboro, N. C.
 Hamilton, Canada
 Houston, Texas
 Los Angeles, Calif.
 Memphis, Tenn.
 New York, N. Y., 51 E. 42nd St.
 New Orleans, La.
 Oakland, Calif., 360 14th St.
 Ottawa, Canada
 Pasadena, Calif.
 Paterson, N. J.
 Philadelphia, Pa., Fidelity Philadelphia Trust Bldg.
 Pittsfield, Mass.
 Plainfield, N. J.
 Portland, Ore.
 Seattle, Wash.
 Springfield, Mass.
 Tacoma, Wash.
 Toronto, Canada
 18 Bloor St.
 11-13 Jordan St.
 Vancouver, B. C.
 815 Hastings St. W.
 Macaulay Nicolls Bldg.
 Washington, D. C.
 Russell-Colvin & Co.
 Oakland, Calif., 414 Central Bank Bldg.
 †Wm. R. Staats Co.
 Pasadena, Calif.
 San Diego, Calif.
 Sutro & Co.
 New York, N. Y.
 44 Wall St.
 16 East 44th St.
 225 Broadway
 475 Fifth Ave.
 Oakland, Calif., Oakland Bank Bldg.
 Walsh, O'Connor & Co.
 Los Angeles, Calif., 540 West 6th St.
 Oakland, Calif., Central Bank Bldg.

 † Associate Member.

Dean Witter & Co.	Portland, Ore., Porter Bldg.
Long Beach, Calif., 403 Pacific South- west Bldg.	Sacramento, Calif., California State Life Bldg.
Los Angeles, Calif., Van Nuys Bldg.	San Diego, Calif., 823 John D. Spreckels Bldg.
Oakland, Calif., Central Bank Bldg.	Seattle, Wash., Hoge Bldg.
Pasadena, Calif.	Tacoma, Walsh, W. R. Rust Bldg.
Citizens Savings Bank Bldg.	
14 No. Marengo	

SECTION IV

FIRMS REPRESENTED BY MEMBERS OF THE SAN FRANCISCO
CURB EXCHANGE*Original List as of December 31, 1929*

Achard & McGahey	Curran & Dwyer
1304 Russ Bldg.	1002 Kohl Bldg.
W. W. Adams & Co.	
Merchants Exchange Bldg.	Davis, Skaggs & Co.
Alanson Brothers & Co.	111 Sutter St.
1109-1112 Kohl Bldg.	Louis Dessauer
John B. Alvarado	351 Montgomery St.
472 Russ Bldg.	Chapman DeWolfe Co.
Anderson & Fox	351 Montgomery St.
317 Montgomery St.	
	Albert L. Ehrman
Bacon, Wardell & Co.	519 California St.
2801 Russ Bldg.	
H. J. Barneson & Co.	Feeney & Slattery
256 Montgomery St.	1256 Russ Bldg.
J. Barth & Co.	Filmer, Bradford & Maxwell
482 California St.	37 Montgomery St.
Edwin D. Berl	Freeman-Parrish & Co.
256 Montgomery St.	315 Montgomery St.
Blumberg & Kehlenbeck	
350 Bush St.	Gorman, Kayser & Co.
Robert C. Bolton & Co.	121 Sutter St.
219-224 Kohl Bldg.	G. M. Greenwood
Brayton, Cutler & Cooke	1272 Russ Bldg.
243 Montgomery St.	Grimes & Swift
James E. Brennan	500 Financial Center Bldg.
50 Post St.	Richard P. Gross
	625 Russ Bldg.
Wm. Cavalier & Co.	Hellmann-Wade & Co.
Insurance Exchange Bldg.	517 California St.
David Conrad	Hendrickson, Shuman & Co.
472 Russ Bldg.	Russ Bldg.

Hoelscher, Shaw & Cournale 1016 Russ Bldg.	L. H. Norris & Son 425-429 Pine St.
Holt & Richey 521 Hunter-Dulin Bldg.	Howard G. Park 401 Russ Bldg.
Charles T. Hughes 433 California St.	E. A. Pierce & Co. 301 Montgomery St.
Alex. H. Isenberg 202 Crocker Bldg.	Plunkett, Lilienthal & Co. 232 Montgomery St.
Fredric H. Johnson 1544 Russ Bldg.	Edward Pollitz & Co. 1821 Russ Bldg.
Sidney P. Kahn 482 California St.	J. W. Porter 760 Russ Bldg.
F. B. Keyston Co. 315 Montgomery St.	E. O. Pringle 315 Montgomery St.
Max I. Koshland & Co. Suite 12, Mills Bldg.	Carl Raiss & Co. 256 Montgomery St.
Leib-Keyston & Co. 50 Post St.	Russell-Colvin & Co. Mills Bldg.
Lewis & Broy 375 Bush St.	Frank C. Shaughnessy & Co. 111 Sutter St.
Lilienthal, Bremer & Co. 211 Montgomery St.	Shingle, Brown & Co. 440 Montgomery St.
Logan & Bryan 401 Montgomery St.	Lawrence J. Steinhardt & Co. 420 Russ Bldg.
Gilbert Loken, Jr. 318 Merchants Exchange Bldg.	Strassburger & Co. 133 Montgomery St.
Clift Lundborg 460 Russ Bldg.	E. L. Strauss 348 Bush St.
Lundborg, Coleman & Stever 617-20 Kohl Bldg.	Sutro & Co. 407 Montgomery St.
Manheim, Dibbern & Co. 485 California St.	Jesse D. Swift 544 Russ Bldg.
McCreery, Finnell & Co. 111 Montgomery St.	L. H. Van Wyck 364 Bush St.
McNear & Co. 362 Russ Bldg.	Walsh, O'Connor & Co. 225 Montgomery St.
J. J. Meigs & Co. 315 Montgomery St.	Rollo C. Wheeler 1243 Russ Bldg.
Newell, Murdoch, Railey & Co. 1050 Russ Bldg.	Dean Witter & Co. 486 California St.

ASSOCIATE MEMBERS OF THE SAN FRANCISCO CURB EXCHANGE

America Investment Co.
National Bankitaly Co.
National City Co.

Peirce, Fair & Co.
Wm. R. Staats Co.
Tucker Hunter Dulin & Co.

BANK MEMBERS OF THE SAN FRANCISCO CURB EXCHANGE

American Trust Co.
Anglo-California Trust Co.
Anglo & London-Paris National Bank
The Bank of California, N. A.

The Canadian Bank of Commerce
Crocker First National Bank
Wells Fargo Bank & Union Trust Co.

SECTION V

MEMBERS OF THE BALTIMORE STOCK EXCHANGE

Aldred & Co.
42 Wall St., New York, N. Y.
Badart, Edward
23 South St.
Baer (John P.) & Co.
305 N. Charles St.
Baker, Watts & Co.
Calvert & Redwood Sts.
Barrett (A. P.) & Co.
3 E. Lexington St.
Biddle & Henry
Citizens National Bank Bldg.
Branch of Philadelphia
Binford & Co.
3 South St.
Brown (Alexander) & Sons
135 E. Baltimore St.
Brugh (Lynn, Jr.) & Co.
Hamilton Hotel Bldg., Hagerstown,
Md.
Cahn (Frank B.) & Co.
Equitable Bldg.
Carroll (Douglas G.) & Co.
4 Stock Exchange Bldg.
Cassilly, Thos. A., Jr.
209 E. Fayette St.
Causey, Wm. W.
716 Continental Bldg.

Chase & Co.
19 Congress St., Boston, Mass.
Colston, Heald & Trail
403-4 Keyser Bldg.
Cooke, Addison B.
Calvert & Redwood Sts.
Cooper (J. C.) & Co.
7 Stock Exchange Bldg.

Daly (Owen) & Co.
23 South St.
Davies, H. L.
15 Stock Exchange Bldg.
Dillehunt (H. B.) & Co.
806-8 Garrett Bldg.
Drewry, Cooper R.
Union Trust Bldg.

Eichelberger (Paul W.) & Co.
17 Guilford Ave.
Elder, William V., Jr.
6 S. Calvert St.

Fahnestock (D.) & Co.
14 Stock Exchange Bldg.
Fisher (J. Harmanus) & Sons
7 South St.
Fisher, Rowland & Tweedy
406 Keyser Bldg.

- Frank, Rosenberg & Co.
227 E. Redwood St.
- Fuller, Richter, Aldrich & Co.
Hartford, Conn.
- Garrett (Robert) & Sons
Garrett Bldg.
- Grieves, E. W. R.
306 Vickers Bldg.
- Haxall, J. T.
16 Stock Exchange Bldg.
- Howard (John D.) & Co.
South & Redwood Sts.
- Iglehart (Jos. A. W.) & Co.
102 St. Paul St.
- Jenkins, Whedbee & Poe
10 South St.
- Johnson, Chas. W. L.
16 Stock Exchange Bldg.
- Koppelman, Walter
219-221 E. Redwood St.
- Lanahan (W. W.) & Co.
Calvert Bldg.
- Leimbach (W. G.) & Co.
7 St. Paul St.
- Lockwood (F. M.) & Co.
Keyser Bldg.
Branch of New York
- Lowndes & Redwood
208 E. Redwood St.
- Mackubin, Goodrich & Co.
111 E. Redwood St.
- Middendorf, J. Wm.
209 Keyser Bldg.
- Nelson (Alex C.) & Co.
33 Stock Exchange Bldg.
- Nelson, Cook & Co.
Calvert & Redwood Sts.
- Oliver, Wm. B.
Stock Exchange Bldg.
- Pittroff, Edw. L.
6 S. Calvert St.
- Poe, Philip L.
6 S. Calvert St.
- Redwood, John
11 Stock Exchange Bldg.
- Riggs & McLane
32 South St.
- Riordan (John J., Jr.) & Co.
Fidelity Bldg.
- Schwarz, Morton & Schwarz
202 Keyser Bldg.
- Scott, George M.
210 Vickers Bldg.
- Scott (Townsend) & Son
209 E. Fayette St.
- Sommerwerck Brothers
30 Stock Exchange Bldg.
- Sopper (Harry B.) & Co.
Vickers Bldg.
- Sothoron, P. L.
32 South St.
- Spielman (W. R.) & Co.
18 N. Jonathon St., Hagerstown,
Md.
- Stein Brothers & Boyce
6 S. Calvert St.
- Stewart, C. Morton
Calvert & Redwood Sts.
- Stickney (Geo. H.) & Co.
502 Keyser Bldg.
- Strother, Brogden & Co.
Calvert & Redwood Sts.
- Taylor (Howard R.) & Co.
4 Stock Exchange Bldg.
- Thompson, R. L.
210 Vickers Bldg.
- Weilepp-Bruton & Co.
Munsey Bldg.
- Westheimer & Co.
213 E. Redwood St.
- Wheeler (J. H.) & Co.
233 E. Redwood St.

Whelan, Thos. A., Jr.

111 E. Redwood St.

Whitridge (John A.) & Son

Keyser Bldg.

Wilson (J. S., Jr.) & Co.

Calvert Bldg.

Wilson, Samuel Y.

1019 Cathedral St.

SECTION VI

MEMBERS OF THE CINCINNATI STOCK EXCHANGE

Ashbrook (Raymond) & Co.

605 Dixie Terminal Bldg.

Ashbrook (Stanley) & Co.

720 Union Trust Bldg.

Ballinger (The L. R.) Co.

202 Union Trust Bldg.

Irwin Ballmann Co., The

First National Bank Bldg.

Bartlett (Benj. D.) & Co.

103 Union Trust Bldg.

Bruner & Reiter Co.

503 Union Trust Bldg.

Cohle & Tyree Co.

711 Union Trust Bldg.

Dominick & Dominick

414 Walnut St.

Branch of New York

Eustis (Geo.) & Co.

810 Fourth National Bank Bldg.

Fifth-Third Union Co.

14 West Fourth St.

Fox (W. E.) & Co.

600 Fourth National Bank Bldg.

Gibson & Gradison

306 Dixie Terminal Bldg.

Grau & Co.

925 Union Central Bldg.

Greene & Brock

301 Third National Bank Bldg.,

Dayton, Ohio

Hill (Alfred) & Co.

207 Traction Bldg.

Hunter, Budde & Duble

906 Union Central Bldg.

Hutton (W. E.) & Co.

301 First National Bank Bldg.

Irwin (E. U.) & Co.

215 Fourth National Bank Bldg.

Lepper (A.) & Co.

306 First National Bank Bldg.

Merz & Back

430 Dixie Terminal Bldg.

Murray (C. C.) & Co.

316 Union Trust Bldg.

Oliver, Dunlap T.

509 Mercantile Library Bldg.

Otis & Co.

218 Dixie Terminal Bldg.

Branch of Cleveland

Reynolds, Brett & Ernst

1127 Union Trust Bldg.

Riley (Geo. C.) Co.

203 Traction Bldg.

Stephenson & Potter

704 Union Central Bldg.

Tillotson & Wolcott Co., The

1026 Union Trust Bldg.

Van Leunen (Paul) & Co.

1202 First National Bank Bldg.

Weil, Roth & Irving Co., The

217 Dixie Terminal Bldg.

Westerfield & Co.
1003 Union Trust Bldg.

Westheimer & Co.
First National Bank Bldg.

SECTION VII

MEMBERS OF THE CLEVELAND STOCK EXCHANGE

Borton & Borton
1326 Hanna Bldg.

Boyd, Moore & Co.
1515 Union Trust Bldg.

Butler, Beadling & Co.
First National Bank Bldg., Youngs-
town, Ohio

Emery (Fred H.) & Co.
1832 Union Trust Bldg.

Ettinger & Hirst
200 National City Bldg.

Finley, Smith & Gentsch
1737 Union Trust Bldg.

Halle (Will S.) & Co.
511 Swetland Bldg.

Hayden, Miller & Co.
1250 Union Trust Bldg.

Hord, Curtiss & Co.
1201 Union Trust Bldg.

Hornblower & Weeks
Union Trust Bldg.
Branch of Boston

Laundon, M. H.
616 Cuyahoga Bldg.

Ledogar & Co.
308 Euclid Ave.

Livingston & Co.
1289 Union Trust Bldg.
Branch of New York

Merrill, Hawley & Co.
1438 Union Trust Bldg.

Merrill, Lynch & Co.
Union Trust Bldg.

Branch of New York
Murch (Maynard H.) & Co.
1186 Union Trust Bldg.
Murphy, Blossom, Morris & Co.
901 Guardian Bldg.

Otis & Co.
216 Superior Ave.

Prince & Whiteley
Union Trust Bldg.
Branch of New York

Pulliam, L. R.
1214 Swetland Bldg.

Saunders, E. A.
310 Union Mortgage Bldg.
Snyder (W. S.) & Co.
1947 Union Trust Bldg.

Ungerleider (Samuel) & Co.
Leader Bldg.
Branch of New York

Wick & Co.
First National Bank Bldg., Youngs-
town, Ohio

Witt, Kraus & Co.
1300 Union Trust Bldg.

SECTION VIII

MEMBERS OF THE COLUMBUS STOCK AND BOND EXCHANGE

Archer (Hugh M.) & Co.
Commercial National Bank Bldg.

Brower, Raymond T., Inc.
Huntington Bank Bldg.

Freeman, Frederick W.
16 E. Broad St.

Gray (Eugene) & Co.
20 S. 3rd St.

Landen, Samuel L.,
Columbus, Ohio

Meeker, Claude
8 E. Broad St.

O'Brien & Lanning
Huntington Bank Bldg.

Otis & Co.
Yuster Bldg.
Branch of Cleveland

Stevenson, Vercoe, Fuller & Lorenz
Huntington Bank Bldg.

Thompson (The Will J.) Co.
First National Bank Bldg.

Ungerleider (Samuel) & Co.
Chamber of Commerce Bldg.
Branch of New York

Vercoe & Co.
Huntington Bank Bldg.
Branch of New York

SECTION IX

MEMBERS OF THE DETROIT STOCK EXCHANGE

Bache (J. S.) & Co.
119 Penobscot Bldg.
Branch of New York

Backus, Fordon & Co.
1619 First National Bank Bldg.

Baker, Simonds & Co.
234 Buhl Bldg.

Bennett, Smith & Co.
640 Griswold St.

Brand, Dresser & Co.
1127 Penobscot Bldg.

Currie (J. D.) & Co.
314 Dime Bank Bldg.

Ghysels (A. G.) & Co.
700 Buhl Bldg.

Glendon (John P.) & Co.
1065 Dime Bank Bldg.

Gorton, Lewis G.
1413 Majestic Bldg.

Harris, Small & Co.
150 West Congress St.

Hendrie, Hall & Murphy
1466 Penobscot Bldg.

Hentz (H.) & Co.
11 Buhl Bldg.
Branch of New York

Hornblower & Weeks
244 Penobscot Bldg.
Branch of Boston

Huebner (George J.) & Co.
1566 Penobscot Bldg.

Hutton (W. E.) & Co.
Book-Cadillac Hotel
Branch of New York

Keane, Higbie & Co.
244 Buhl Bldg.

King, Boug, Stodgell & Co.
Windsor, Ontario
212 Penobscot Bldg.

Livingstone, Crouse & Co.
409 Griswold St.

MacCrone (E. E.) & Co.
144 Penobscot Bldg.

Merrill, Lynch & Co.
Ford Bldg.
Branch of New York

Moss (W. E.) & Co.
1402 Buhl Bldg.

Nicol, Ford & Co.
314 Ford Bldg.

Noble (H. W.) & Co.
306 Dime Bank Bldg.

O'Hara, Ferriss & Co. 206 Buhl Bldg.	Shader, Winckler Co. 204 Penobscot Bldg.
Otis & Co. 126 W. Congress St. Branch of Cleveland	Stockard (Joel) & Co. 106 Penobscot Bldg.
Paine, Webber & Co. Penobscot Bldg.	Ungerleider (Samuel) & Co. Penobscot Bldg. Branch of New York
Parcells (Charles A.) & Co. 639 Penobscot Bldg.	Wallace & Co. 1520 First National Bank Bldg.
Reilly (W. E.) & Co. 1900 Penobscot Bldg.	Ware & Co. 328 Buhl Bldg. Branch of New York
Roney (Wm. C.) & Co. 506 Dime Bank Bldg.	Watling, Lerchen & Hayes 168 W. Congress St.
Rose (Wm. H.) & Co. 751 Penobscot Bldg.	Whittlesey, McLean & Co. 2014 Penobscot Bldg.
Schlachman, Max 1812 Penobscot Bldg.	Woodruff (D. M.) & Co. 1666 Buhl Bldg.

SECTION X

MEMBERS OF THE HARTFORD STOCK EXCHANGE

Adams, Merrill & Co. 36 Pearl St.	Fuller, Richter, Aldrich & Co. 94 Pearl St.
Ballard, Eugene Stock Exchange Bldg.	Goodwin, Beach & Co. 64 Pearl St.
Barnes (Roy T. H.) & Co. 125 Trumbull St.	Paine, Webber & Co. 49 Pearl St. Branch of Boston
Bolles & Co. 115 Pearl St.	Perkins, Thomas C., Inc. 36 Pearl St.
Campbell & Co. 49 Pearl St.	Putnam & Co. 6 Central Row
Conning & Co. 50 Lewis St.	Shaw & Co. 75 Pearl St.
Cooley (Francis R.) & Co. 125 Pearl St.	Thomson, Fenn & Co. 56 Pearl St.
Eddy Brothers & Co. 33 Lewis St.	James L. Thomison 1205 Prospert Ave., West Hartford, Conn.
Eddy, Ernest J. Capitol National Bank,	

SECTION XI

MEMBERS OF THE LOS ANGELES STOCK EXCHANGE

- | | |
|--|--|
| Akin-Lambert Co.
515 Stock Exchange Bldg.
American Investment Co.
650 S. Spring St.
American National Co.
Pac. S. W. Bank Bldg.
Branch of San Francisco | Dickinson, R. B.
1128 Stock Exchange Bldg.
Dowell & Hull
324 Van Nuys Bldg.
Drake, Riley & Thomas
314 Van Nuys Bldg.
Drake (Wilcox) & Co.
1100 Pac. S. W. Bank Bldg.
Dunk-Harbison Co.
801-2 Haas Bldg. |
| Bacon & Co.
410 Pac. S. W. Bank Bldg.
Branch of San Francisco | Earl (W. J.) & Co.
300-4 Bartlett Bldg.
Ellis (S. H.), Inc.
1119 Stock Exchange Bldg. |
| Banks, Huntley & Co.
1212 Stock Exchange Bldg.
Barneson (H. J.) & Co.
111 W. Seventh St.
Bayly Brothers, Inc.
727 W. Seventh St. | Finigan & Miller
821 Stock Exchange Bldg.
Frank (Alvin H.) & Co.
910 Bank of America Bldg. |
| Bell, Searl & Rosenthal, Inc.
907 Bank of America Bldg.
Benchley (Frank) & Co.
615 Stock Exchange Bldg.
Bond & Goodwin & Tucker, Inc.
100 Rowan Bldg.
Branch of San Francisco | Gorman, Kayser & Co.
650 S. Spring St.
Branch of San Francisco |
| Brashears (G.) & Co.
501 Security Bldg.
Brophy, Weirick & Co.
628 Bank of America Bldg.
Burr (Geo. H.) Conrad & Broom, Inc.
501 Calif. Bank Bldg.
Branch of San Francisco | Grant (D. G.) Co.
415 Citizens National Bank Bldg.
Graves, Banning & Co.
600 Calif. Bank Bldg. |
| Cahn, McCabe & Co.
716 S. Spring St.
Cavalier (Wm.) & Co.
650 S. Spring St.
Citizens National Co.
Citizens National Bank Bldg.
Crisler (L. A.) & Co.
702 Stock Exchange Bldg. | Harris, Fred E.
904 Bank of America Bldg.
Hay, Earl G.
926 Bank of America Bldg.
Hunter, Dulin & Co.
900 Calif. Bank Bldg.
Hutton (E. F.) & Co.
643 S. Spring St.
Branch of New York |
| Davis, Friedlander & Speth, Inc.
607 Bank of America Bldg. | Ingoldsby, Giles & Co.
650 S. Spring St. |

- Jameson (A. L.) & Co.
650 S. Spring St.
- Jones, Hubbard & Donnell, Inc.
412 W. Sixth St.
- Leib-Keyston & Co.
Lobby Pac. Mutual Bldg.
- Lewis (M. H.) & Co.
420 Citizens National Bank Bldg.
- Logan & Bryan
636 S. Spring St.
Branch of New York
- Los Angeles (Inv.) Securities Co.
804 Stock Exchange Bldg.
1035 S. Broadway
- MacLaughlin (Leo G.) Co.
706 Stock Exchange Bldg.
- Martin (James R.) & Co.
647 S. Spring St.
- Miller, Clyde E.,
1039 Fidelity Bldg.
- Miller, Vosburg & Co.
510 Bank of America Bldg.
- Morris, A. W.
701-2 Haas Bldg.
- Newland (E. H.) & Co.
904 Stock Exchange Bldg.
- Paul-Bullis & Co.
704 S. Spring St.
- Pierce (E. A.) & Co.
515 W. Sixth St.
Branch of New York
- Rath (Howard G.) Co.
512 Pac. Mutual Bldg.
- Security-First National Co.
Sixth and Spring Sts.
- Simmons (E. C.) & Co.
1022 Bank of America Bldg.
- Staats (Wm. R.) Co.
640 S. Spring St.
- Streeter (C. C.) & Co.
402 Stock Exchange Bldg.
- Sutro & Co.
407 Montgomery St., San Francisco,
Calif.
- Toole-Tietzen & Co.
509 Van Nuys Bldg.
- Tucker-Reagan Co.
814 Security Bldg., Long Beach,
Calif.
- Union Co.
3d Floor, Union Bank Bldg.
- Walker (M. S.) & Co.
1011 Stock Exchange Bldg.
Branch of Long Beach, Calif.
- Welch (Jas. M.) & Co.
202 Financial Center Bldg.
- Welch, McKellar & Co.
930 Pac. S. W. Bank Bldg.
- Welch (Torrance C.) & Co.
301 Fidelity Bldg.
- Williams (Tenney) & Co.
625 Van Nuys Bldg.
- Witter (Dean) & Co.
I. N. Van Nuys Bldg.
Branch of San Francisco
- Wolcott (G. F.) & Co.
1306 Stock Exchange Bldg.
- Young, Clarke & Co.
212 Bartlett Bldg.

SECTION XII

MEMBERS OF THE NEW ORLEANS STOCK EXCHANGE

- Airey & Stouse
816 Union St.
- Andrieu, E. A.
629 St. Peter St.
- Barriere, E. P.
740 Gravier St.
- Beer, H. & B.
817 Gravier St.

- Bruning, H. J.
1002 Tulane Ave.
- Canal Bank & Trust Co.
200 Baronne St.
- Claiborne, Duralde
320 St. Charles St.
- Clay (Geo. W.) & Co.
1551 Canal Bank Bldg.
- Crusel, J. Edw.
407 Carondelet St.
- Dane & Weil, Inc.
1528 Canal Bank Bldg.
- Dufour, Elmore
740 Gravier St.
- Ellis (C. P.) & Co.
905 Hibernia Bldg.
- Emsheimer, A.
Canal Bank Bldg.
- Eustis & Jones
734 Gravier St.
- Fairfax & Butler,
410 Interstate Bank Bldg.
- Fenner & Beane
818 Gravier St.
- Fowler, H. W.
204 Balter Bldg.
- Gauche, J. A.
402 N. O. Bank Bldg.
- Glenny, Edmund J.,
818 Gravier St.
- Gumbel, Herbert
Maritime Bldg.
- Gurley, E. R.
814 Perdido St.
- Hardin, J. D., Jr.
821 Gravier St.
- Hayne, F. B.
Cotton Exchange Bldg.
- Hibernia Bank & Trust Co.
301 Carondelet St.
- Koen, U.
722 Gravier St.
- Labenberg, M. H.
740 Gravier St.
- Lehman, Stern & Co.
840 Union St.
- Levert, J. B.
423 Carondelet St.
- Martin (Fontaine) & Co.
728 Gravier St.
- Monroe, Jas. H.
1331 Philip St.
- Moore, Hyams & Co.
610 Common St.
- Mysing, A. W.
405 Carondelet St.
- Mysing, H.
806 Perdido St.
- Mysing, W. A.
806 Perdido St.
- New Orleans Bank & Trust Co.
N. O. Bank Bldg.
- Newman, H. W.
901 Hibernia Bank Bldg.
- Newman, Julian B.
217 Carondelet St.
- Newman, Saunders & Co.
217 Carondelet St.
- Pierce (E. A.) & Co.
207 Pere Marquette Bldg.
Branch of New York
- Poupart, S. J.
823 Perdido St.
- Prudhomme, A.
740 Gravier St.
- Reinach, Sol.
740 Gravier St.
- Schulze, C. H.
740 Gravier St.
- Schwartz (S. J.) & Co.
821 Gravier St.
- Smith, Mason & Co.
843 Union St.
- Stanton (Lewis H.) & Co.
601 Hibernia Bldg.

Steinhardt, Jeffrey 730 Gravier St.	Watson, Williams & Co. 822 Gravier St.
Tessier (C. A.) & Son 134 Carondelet St.	Weil & Gatling 500 Marine Bank Bldg.
Trufant, S. A. 212 N. O. Bank Bldg.	Wheeler & Woolfolk 720 Common St.
Uhlhorn, C. L. 1206 Canal Bank Bldg.	Whitney-Central Trust & Savings Bank Whitney Bank Bldg.
Villere (St. Denis J.) & Co. 522 Canal Bank Bldg.	Woolfolk, Waters & Co. 1101 Hibernia Bank Bldg.
Vincent, Hugh E. 1414 Hibernia Bldg.	Yarbrough, Donald & Co. 907 Masonic Temple Bldg.

SECTION XIII

MEMBERS OF THE PHILADELPHIA STOCK EXCHANGE

Ashton, Augustus Trask 13th Floor, Finance Bldg.	Boenning & Co. 1606 Walnut St.
Bache (J. S.) & Co. Pennsylvania Bldg. Branch of New York	Borer & Co. 421 Chestnut St.
Barclay, Henry C. 123 S. Broad St.	Boston (R. L.) & Co. 1411 Walnut St.
Barclay, Moore & Co. 123 S. Broad St.	Brooke, Stokes & Co. 15th & Locust Sts.
Barney (Chas. D.) & Co. 1428 Walnut St. Branch of New York	Brown Brothers & Co. 1531 Walnut St. Branch of New York
Battles & Co. 1518 Locust St.	Brown (Champ C.) & Co. 317-18 Real Estate Trust Bldg.
Bayuk Brothers Packard Bldg.	Brylawski, Edward Stock Exchange Bldg.
Bean (Chas. H.) & Co. 1523 Walnut St.	Butcher & Sherrerd 220 Real Estate Trust Bldg.
Bergson, Louis J. General Trust Bldg.	Canby, Wm. Marriott 532 Land Title Bldg.
Biddle & Henry 1522 Locust St.	Carrigan, S. Boyd Wynnewood, Pa.
Biddle (Thos. A.) & Co. 1429 Walnut St.	Carstairs & Co. 1419 Walnut St.
Bioren, John S. 717 Chestnut St.	Cassatt & Co. Commercial Trust Bldg.
Bioren & Co. 1508 Walnut St.	Cherry, Robert, Jr. 113 S. Fifth St.

- Clark (E. W.) & Co.
16th & Locust Sts.
Coleman, Horace C.
123 S. Broad St.
Coles & Wurts
218 S. 15th St.
Cook, Elmer A.
919 Commercial Trust Bldg.

Daniel & Co.
1520 Locust St.
Davison, Samuel T.
Stock Exchange Bldg.
DeHaven & Townsend
1415 Walnut St.
de Saint Phalle & Co.
1604 Walnut St.
Dixon & Co.
1428 Walnut St.
Downey & Co.
123 S. Broad St.
Drayton, Penington & Colket
1427 Walnut St.
Drexel & Co.
15th & Walnut Sts.

Eastman, Dillon & Co.
1506 Walnut St.
Branch of New York
Eisele & King
9 Clinton St., Newark, N. J.
Eliaason, Kolb & Eliaason
Packard Bldg.
Elkins, Morris & Co.
305 Land Title Bldg.
Embick, Paul A.
1210 Stock Exchange Bldg.
Embigh, Raymond M.
402 Stock Exchange Bldg.
Emory, Freed & Co.
109 S. 3d St.

Fearon (Charles) & Co.
511 Chestnut St.
Fitch, Crossman & Co.
15th & Locust Sts.
Fox (Geo. S.) & Sons
436 Commercial Trust Bldg.

Freeman, W. McL.
c/o Hampton L. Carson
1524 Chestnut St.
French (E. W.) & Co.
123 S. Broad St.
Fridenberg, S. M. & M. S.
305-6 Lafayette Bldg.
Frost & Co.
422 Stock Exchange Bldg.
Fuller (Wm. A. M.) & Co.
1032 Ins. Co. of No. Am. Bldg.

Garber (F. W.) & Co.
119 S. 5th St.
Gibbons, Edward
943 Real Estate Trust Bldg.
Glendinning (Robt.) & Co.
Packard Bldg.
Goodbody & Co.
1605 Walnut St.
Graff, Frank M.
1508 Walnut St.
Graham, Parsons & Co.
1422 Walnut St.
Greene & Co.
612 Stock Exchange Bldg.
Greenwood, Herbert T.
409 Stock Exchange Bldg.

Hagar, F. Kimball
1603 Walnut St.
Haines, Collier & Co.
1520 Locust St.
Hamlin, E. M. & Co.
Bankers Bldg., P. O. Sq.
Boston, Mass.
Hammitt & Co.
400 Stock Exchange Bldg.
Hamstrom & Co.
208 Real Estate Trust Bldg.
Hano, Wasserman & Co.
1418 Walnut St.
Harper & Turner
Stock Exchange Bldg.
Harrison & Co.
123 S. Broad St.
Harrison, Smith & Co.
1515 Locust St.

- Hauberger, Geo. H.
405 Stock Exchange Bldg.
- Hayden, Stone & Co.
25 Broad St., New York, N. Y.
- Hecker & Co.
6th & Walnut Sts.
- Henry & Kirkbride
1430 S. Penn Square
- Heyl, Jacob E.
514 Phila. Bank Bldg.
- Hibbs (W. B.) & Co.
Hibbs Bldg., Washington, D. C.
- Holman, Watson & Rapp
1420 Walnut St.
- Hopper, Soliday & Co.
1420 Walnut St.
- Huhn, George A.
Union League
- Huhn, John Bell
1605 Walnut St.
- Humphrey (Wm. M.) & Co.
1518-20 Packard Bldg.
- Jackson, Edward S., Jr.
402 Stock Exchange Bldg.
- Janney, Walter C.
1529 Walnut St.
- Jefferis, W. Harper
1512 Chestnut St.
- Jones (C. Clothier) & Co.
1603 Walnut St.
- Jones, Miller & Co.
Commercial Trust Bldg.
- Kahn, Jacob C.
709 Provident Trust Bldg.
- Keen (Harold P.) & Co.
606 Otis Bldg.
- Kelley, James J.
1500 Walnut St.
- Kennedy & Co.
2123-24 Land Title Bldg.
- Kurtz Brothers
Morris Bldg.
- Ladenburg, Thalmann & Co.
25 Broad St., New York, N. Y.
- Laird, Bissell & Meeds
1501 Walnut St.
Branch of Wilmington, Del.
- Lawson, W. L.
Union League
- Lee, John K.
1411 Chestnut St.
- Levy, S. L.
138 S. 3d St.
- Lilley, Blizzard & Co.
1707 Packard Bldg.
- Lipper (Arthur) & Co.
Room 101, 50 Broad St.
New York, N. Y.
- Lloyd & Palmer
334 Commercial Trust Bldg.
- Loeb, Oscar
824 Stock Exchange Bldg.
- Looram & Co.
1510 Chestnut St.
- Louchheim, Minton & Co.
111 Broadway, New York, N. Y.
- MacDonald & Co.
234 Real Estate Trust Bldg.
- Mackie, Hentz & Co.
1503 Walnut St.
- MacMeekin & Williamson
123 S. Broad St.
- Magill, Kirk W.
At J. W. Sparks
1510 Chestnut St.
- Martin, Carl N.
718-22 Packard Bldg.
- Matthes, Percy E.
305 Land Title Bldg.
- Matthews, Caldwell F.
406 Stock Exchange Bldg.
- Matthews, Frank C.
406 Stock Exchange Bldg.
- Maus (William H.) & Co.
307 Franklin Trust Bldg.
- McBride & Co.
523-6 Stock Exchange Bldg.
- McCormack (J. L.) & Co.
5 Nassau St., New York, N. Y.
- McCreery (Samuel) & Co.
1518 Walnut St.

- McLaughlin (W. J.) & Co.
508 Stock Exchange Bldg.
- Mellor, E. Fraley
406 Stock Exchange Bldg.
- Middleton (M. F., Jr.) & Co.
1512 Chestnut St.
- Monges, Davis & Lang
104 S. 5th St.
- Moore (E. J.) & Co.
141 S. 4th St.
- Moore, Leonard & Lynch
Union Trust Bldg., Pittsburgh, Pa.
Branch of New York
- Moorhead, Barlow
Germantown Cricket Club
- Morgan (Reed A.) & Co.
304 West End Trust Bldg.
- Morley, Wood & Co.
511 Chestnut St.
- Moyer & Co.
1500 Walnut St.
- Mullin (Frank) & Co.
Packard Bldg.
- Newbold's Son (W. H.) & Co.
1517 Locust St.
- Newburger, Henderson & Loeb
1512 Walnut St.
- Nick, James F.
317 Real Estate Trust Bldg.
- Parke, John S.
409 Stock Exchange Bldg.
- Parrish & Co.
212 S. 15th St.
- Parsly Brothers & Co.
1421 Chestnut St.
- Paul & Co.
1420 Walnut St.
- Phillips (Samuel K.) & Co.
1317 Packard Bldg.
- Powell & Co.
426 Stock Exchange Bldg.
- Priory, J. Albert
1014 Packard Bldg.
- Rebre & Vogel
1500 Walnut St.
- Redmond & Co.
1429 Walnut St.
Branch of New York
- Reilly, Brock & Co.
1607 Walnut St.
- Richards & Co.
Real Estate Trust Bldg.
- Ristine (F. P.) & Co.
123 S. Broad St.
- Rosenbaum, Leon
1744 Market St.
- Rowe, Robert G.
1429 Walnut St.
- Sailer (A. J.) & Co.
113 S. 5th St.
- Scott, Edgar
50 Broadway, New York, N. Y.
- Seeler & Co.
110 S. 3d St.
- Shelmerdine, Wm. H.
409 Phila. Bank Bldg.
- Smith Brothers & Co.
Packard Bldg.
- Smith (Charles) & Sons
303 Chestnut St.
- Smith (Edward B.) & Co.
1411 Chestnut St.
- Smith, Winthrop
Glenside, Pa.
- Smith, W. Hinckle
200 Liberty Bldg.
- Snyder (Geo. E.) & Co.
301 Stock Exchange Bldg.
- Snyder (R. M.) & Co.
1520 Locust St.
- Sparks (J. W.) & Co.
1510 Chestnut St.
- Starr & Co.
123 S. Broad St.
- Starr, Isaac
123 S. Broad St.
- Stephenson, George H.
Stock Exchange Bldg.
- Stokes (Edw. Lowber) & Co.
1500 Chestnut St.
- Sulzbacher, Granger & Co.
111 Broadway, New York, N. Y.

- Suplee, Horace L., Jr.
At E. W. French & Co.
123 S. Broad St.
- Sutro Brothers & Co.
Packard Bldg.
Branch of New York
- Swab, Howard M.
47 Phila. Bourse
- Taylor, Robert D.
409 Stock Exchange Bldg.
- Taylor, Roland L.
1421 Chestnut St.
- Thayer, Baker & Co.
1237 Commercial Trust Bldg.
- Thomas, E. R.
At Chas. D. Barney & Co.
1428 Walnut St.
- Toland, Trimble & Co.
1326 Walnut St.
- Waber, David
Bankers Trust Bldg.
- Ware & Co.
1518 Walnut St.
Branch of New York
- Watt (James K.) & Co.
1236-38 Widener Bldg.
- Weeks, Henry C.
At West & Co.
1511 Walnut St.
- Wells, Charles C.
824 Stock Exchange Bldg.
- West & Co.
1511 Walnut St.
- Wheeler & Co.
203 North American Bldg.
- Whelen, Townsend & Co.
1606 Walnut St.
- Wieand, Franklin D., Jr.
1508 Walnut St.
- Wistar, Carter & Co.
1402 Walnut St.
- Wolf Brothers & Co.
213-215 S. Broad St.
- Wood, Charles M.
5950 Drexel Road
- Woodside, J. Alan
1211 Stock Exchange Bldg.
- Wurts, Dulles & Co.
Franklin National Bank Bldg.
- Wynn, James H.
At J. W. Sparks & Co.
1510 Chestnut St.
- Yarnall & Co.
218 S. 16th St.

SECTION XIV

MEMBERS OF THE PITTSBURGH STOCK EXCHANGE

- Askin, George K.
421 Wood St.
- Askin (J. M.) & Co.
Peoples Bank Bldg.
- Ballard, W. E.
Keystone Bank Bldg.
- Barbour (John B.) & Co.
Magee Bldg.
- Burt, W. N., Jr.
Oliver Bldg.
- Carothers (James) & Co.
Union Bank Bldg.
- Chapin (S. B.) & Co.
111 Broadway, New York, N. Y.
- Dixon, Joseph M.
437 Fourth Ave.
- Dornberger, R. S.
229 Fourth Ave.
- Eastman, Dillon & Co.
Oliver Bldg.
Branch of New York
- Edmundson, Eli, Jr.
Magee Bldg.

- Edwards (H. S.) & Co.
Union Bank Bldg.
Evans, Sanford B.
229 Fourth Ave.
- Foster, Bayard D.
Third National Bank
- Glendinning (Robt.) & Co.
Goldsborough (W. W.) & Co.
Union Bank Bldg.
- Halsey (C. D.) & Co.
Benedum-Trees Bldg.
New York-Pittsburgh
- Hanson & Hanson
25 Broadway, New York, N. Y.
- Hetzel (Henry G.) & Co.
223 Fourth Ave.
- Hill, Wright & Frew
Union Trust Bldg.
- Holmes (J. H.) & Co.
Union Bank Bldg.
New York-Pittsburgh
- Hornblower & Weeks
Columbia Bank Bldg.
Branch of Boston
- Kane, John A.
Benedum-Trees Bldg.
- Kay, Richards & Co.
Union Trust Bldg.
- Kean, Taylor & Co.
5 Nassau St., New York, N. Y.
- Levy (M. M.) & Co.
Keystone Bank Bldg.
- Logan & Bryan
42 Broadway, New York, N. Y.
- Lotz, H. J.
Keystone Bank Bldg.
- Masten (A. E.) & Co.
Vandergrift Bldg.
- McJunkin, Patton & Co.
Union Bank Bldg.
- McLaughlin, MacAfee & Co.
Clark Bldg.
- Mitchell & Craft
Washington, Pa.
- Moore, Leonard & Lynch
Union Trust Bldg.
New York-Pittsburgh
- Morris, Brown & Co.
316 Fourth Ave.
- Nelson (L. T.) & Co.
120 Broadway, New York, N. Y.
- Noll (Isaac D.) & Co.
50 Broad St., New York, N. Y.
- Nuttall (R. V.) & Co.
First National Bank Bldg.
- Post & Flagg
Oliver Bldg.
New York-Pittsburgh
- Preston, Watt & Schoyer
Union Bank Bldg.
- Purman (Thomas R.) & Co.
Washington, Pa.
- Reynolds & Co.
Union Bank Bldg.
- Robinson & Orr
Citizens Savings Bank Bldg.
- Rosenbloom & Lowenthal
Diamond Bank Bldg.
- Stevenson, Vercoe, Fuller & Lorenz
Huntington Bank Bldg.
Columbus, Ohio
- Stout & Co.
Union Bank Bldg.
- Ungerleider (Samuel) & Co.
50 Broadway, New York, N. Y.
- Vercoe & Co.
Columbus, Ohio
- Vockel (S. M.) & Co.
Diamond Bank Bldg.
- Wellington & Co.
Union Trust Bldg.
Branch of New York
- Wettach & Co.
218 Fourth Ave.
- Wettengel (A. C.) & Co.
Peoples Bank Bldg.

SECTION XV

MEMBERS OF THE ST. LOUIS STOCK EXCHANGE

- Abeles (Samuel C.) & Co.
Boatmens Bank Bldg.
- Aid & Co., Inc.
Security Bldg.
- Anderson (Lorenzo E.) & Co.
711 St. Charles St.
- Anderson (Oliver J.) & Co.
718 Locust St.
- Augustine & Co.
Security Bldg.
- Barklage, Louis
Security Bldg.
- Bauer Brothers Brokerage Co.
312 N. 4th St.
- Bennett (James E.) & Co.
705 Olive St.
Branch of Chicago
- Betts (J. F.) & Co.
Security Bldg.
- Brown (Paul) & Co.
821 Pine St.
- Burr (Geo. H.) & Co.
Liberty Central Bldg.
Branch of New York
- Carton, J. B.
4484 Westminster Place
- Cobb (R. H.) & Co.
506 Olive St.
- Daly, Seddon & Co.
Bank of Commerce Bldg.
- D'Oench, Duhme & Co., Inc
507 Locust St.
- Edwards (A. G.) & Sons
412 Olive St.
- Francis, Brother & Co.
Fourth & Olive Sts.
- Friedman, Klein & Co.
Paul Brown Bldg.
- Gessler (E. A.) & Son
Merchants-Laclede Bldg.
- Glaser, C. S.
Boatmens National Bank
- Gray (H. J.) & Co.
Boatmens Bank Bldg.
- Hawes & Co.
320 N. 4th St.
- Hinrichs, R. E.
Boatmens Bank Bldg.
- Jenkins, B. C.
Merchants-Laclede Bldg.
- Jones (Edw. D.) & Co.
Boatmens Bank Bldg.
- Knight, Dysart & Gamble
401 Olive St.
- Kotany, M.
Security Bldg.
- Little & Hays Inv. Co.
509 Olive St.
- Louderman, W. M.
Bank of Commerce Bldg.
- Meyer, J. P.
Chemical Bldg.
- Nickerson (John) & Co.
Boatmens Bank Bldg.
- Reinholdt (J. W., Jr.) & Co.
Boatmens Bank Bldg.
- Richards & Co.
Security Bldg.
Branch of New York
- Ruppert (H. L.) & Co.
402 Pine St.
- Semple, Jacobs & Co.
Rialto Bldg.

Simon (I. M.) & Co.
315 N. 4th St.
Smith, Moore & Co.
509 Olive St.
Steinberg (Mark C.) & Co.
Boatmens Bank Bldg.
Stifel, Nicolaus & Co., Inc.
Boatmens Bank Bldg.
Stix & Co.
509 Olive St.

Thomson (L. W.) & Co.
Bank of Commerce Bldg.
Timmerman, Fred C.
Planters Bldg.
Waldheim, Platt & Co.
Merchants-Laclede Bldg.
Walker (G. H.) & Co.
Broadway & Locust
Whitaker & Co.
300 N. 4th St.

SECTION XVI

MEMBERS OF THE WASHINGTON STOCK EXCHANGE

Bell, C. J.
American Security & Trust Co.
Booker (Y. E.) & Co.
1508 H St. N.W.
Brawner, J. W.
1700 Eye St. N.W.
Casilear, R. A.
Falls Church, Va.
Crane, Parris & Co.
821 15th St. N.W.
Dulaney, H. R.
815 Vermont Ave. N.W.

Emrich, E. J.
1000 Connecticut Ave. N.W.
Erwin, Henry P.
Hibbs Bldg.

Flather, H. H.
Hibbs Bldg.
Foraker, Arthur
1512 H St. N.W.

Glover, Charles C.
Riggs National Bank
Glover & Flather
1508 H St. N.W.
Gockeler, C. J.
District National Bank

Green, James M.
District National Bank Bldg.
Harrington, J. Wm.
Hibbs Bldg.
Hendrick, J. T.
Woodward Bldg.
Hibbs (W. B.) & Co.
Hibbs Bldg.
Hillyer, Edward L.
Union Trust Co.
Hoover, W. D.
National Savings & Trust Co.

Irving & Johnston
Woodward Bldg.

Jacobsen, Charles
National Metropolitan Bank
Johnson, O. H. P.
National Metropolitan Bank

Keech (F. B.) & Co.
1510 H St. N.W.
Branch of New York

Mackall, Wm. W., Jr.
214 Woodward Bldg.
McLean, Edward G.
1509 H St. N.W.

Morrison, L. W. 414 W. Colorado St. Pasadena, Calif.	Pryor, F. B. 1700 Eye St. N.W.
Morse, Frank P. 729 15th St. N.W.	Reeside, A. H. Woodward Bldg.
Murphy (G. M. P.) Co. 1416 H St. N.W. Branch of New York	Slaughter, L. A. Commercial National Bank
Norment, C. F. National Bank of Washington	Thompson, L. L. 4842 16th St. N.W.
O'Donnell, James Liberty National Bank	Walson, George O. Liberty National Bank
Parris, A. K. 821 15th St. N.W.	Weber, G. W. 729 15th St. N.W.
Poole, John Federal-American National Bank	Wilkins, John F. 1700 Massachusetts Ave. N.W.

SECTION XVII

MEMBERS OF THE BUFFALO STOCK EXCHANGE

Babcock, Schoellkopf & Co. 70 Niagara St.	Gardner (W. A.) & Co. 205 Ellicott Square
Baker, Trubee & Putnam, Inc. 11 Niagara St.	Glenny, Monro & Moll 1418 Liberty Bank Bldg.
Brody, Herod & Co. 525 Manufacturers & Traders Bldg.	Great Lakes Share Corp. Liberty Bank Bldg.
Brott & Co. 236 Main St.	Griffith, Kendall & Rochester 2020 Liberty Bank Bldg.
Chambers (A. L.) & Co. 1517 Liberty Bank Bldg.	Hayes & Collins 1220 Genesee Bldg.
Cleversley, Rounds, Mundie & Gowans 828 White Bldg.	Liberty Share Corp. Liberty Bank Bldg.
Cook, Bellinger & Taylor 717 Liberty Bank Bldg.	Manufacturers & Traders-Peoples Trust Co. 284 Main St.
Dann (J. C.) & Co. Ellicott Square	Marine Trust Co. Marine Trust Bldg.
Dennison (H. B.) & Co. 18 Erie St.	Marine Union Investors 1306 Rand Bldg.
Drayton, Penington & Colket Ellicott Square	O'Brian, Potter & Stafford 215 Main St.
Evers, Reber & Co., Inc. 314 Ellicott Square	

Parker (S. C.) & Co.
1031 Ellicott Square
Perkins (Erickson) & Co.
203 Ellicott Square
Perry, Herbert L.
402 Manufacturers & Traders Bldg.
Pistell, Deans & Co.
124 Pearl St.

Sawtelle, Andrew H.
702 Manufacturers & Traders Bldg.
Schoellkopf, Hutton & Pomeroy, Inc.
70 Niagara St.
Seeley & Thompson
11 Niagara St.

Solloway, Mills & Co.
Andrews Bldg.

Victor, Common & Co., Inc.
Manufacturers & Traders Bldg.

Walcott (Sidney S.) & Co.
486 Ellicott Square
Wallace & Trost
1718 Liberty Bank Bldg.
Wilkes (Edward N.) & Co., Inc.
587 Ellicott Square
Wright (A. J.) & Co.
Erie County Bank Bldg.

SECTION XVIII

MEMBERS OF THE MINNEAPOLIS-ST. PAUL STOCK EXCHANGE

Backus, Seymour W.
1100 Builders Exchange Bldg.,
Minneapolis
Baker (Morris T.) & Co.
330 Baker Bldg., Minneapolis
Carroll Investment Corp.
808 Phoenix Bldg., Minneapolis
Dain (J. M.) & Co.
749 McKnight Bldg., Minneapolis
Doerr Investment Co.
24 N. Third St., Minneapolis
Eastman, W. W.
218 Roanoke Bldg., Minneapolis
Farnum, Winter & Co.
159 Baker Arcade, Minneapolis
Branch of Chicago
First Minneapolis Co.
115 S. 5th St., Minneapolis
First St. Paul Co.
St. Paul
Foley, E. T.
209 Gilfillan Block, St. Paul
Gamble Stores, Inc.
434 Stinson Blvd., Minneapolis

Gates (Stanley) & Co.
Merchants Bank Bldg., St. Paul
Gluek, Karl G.
2021 N. E. Marshall St., Minneapolis
Grubb, Rodgerson Co.
238 Roanoke Bldg., Minneapolis
Harris, Winthrop & Co.
218 Roanoke Bldg., Minneapolis
Branch of New York
Hickey, Doyle & Co.
39 So. La Salle St., Chicago, Ill.
Hilgerman, George
1014 Roanoke Bldg., Minneapolis
Hopwood & Co.
529 S. Second Ave., Minneapolis
Kalman & Co.
144 Endicott Bldg., St. Paul
Kendrick, E. S.
Builders Exchange Bldg., Minneapolis
Kerfoot (Paul S.) & Co.
Pioneer Bldg., St. Paul
Lane, Piper & Jaffray, Inc.
First National-Soo Bldg.,
Minneapolis

- Lewis (Chas. E.) & Co.
 601 S. Second Ave., Minneapolis
 Lewis, Todd W.
 601 S. Second Ave., Minneapolis
 Lowe (Justus F.) Co., Inc.
 First National-Soo Bldg.,
 Minneapolis

 Mahoney, C. D.
 260 Roanoke Bldg., Minneapolis
 Marquette Trust Co.
 Minneapolis
 Martin, Gerald R.
 109 Chamber of Commerce Bldg.,
 Minneapolis
 McCahill & Co.
 730 McKnight Bldg., Minneapolis
 McCormick & Co.
 264 Roanoke Bldg., Minneapolis
 McKinnon, Neil P.
 230 Roanoke Bldg., Minneapolis
 Metropolitan National Co.
 Minneapolis
 Midland National Bank & Trust Co.
 Minneapolis
 Minnesota Co., The
 Minneapolis
 Molyneaux, J. J.
 15 S. Fifth St., Minneapolis

 Northern National Corp.
 Duluth, Minn.
 Northwestern Trust Co.
 344 Jackson St., St. Paul

 Osborne, Willis W.
 627 S. Second Ave., Minneapolis
 Overman, Irving H.
 115 S. Fifth St., Minneapolis

 Paine, Webber & Co.
 McKnight Bldg., Minneapolis
 Branch of New York
 Phillips, Arthur N.
 408 Roanoke Bldg., Minneapolis
 Piper, George F., Jr.
 First National-Soo Bldg.,
 Minneapolis

 Rand, Arthur H.
 2313 Park Ave., Minneapolis
 Rand & Co.
 914 Roanoke Bldg., Minneapolis
 Rice, Robert A.
 159 Baker Arcade, Minneapolis
 Robinson, Jenkins, Taylor Co.
 627 S. Second Ave., Minneapolis

 Smith (C. H. F.) & Son
 262 Bremer Arcade, St. Paul
 Traer & Co.
 First National-Soo Bldg.,
 Minneapolis

 Wells, Dickey Co.
 Minneapolis
 Woodard, Brooks & Bundy, Inc.
 Pioneer Bldg., St. Paul

APPENDIX D

NEW YORK STOCK EXCHANGE SECURITIES AND THEIR SYMBOLS

NOTES ON STOCK TICKER REPORTING

One price following the abbreviation of a stock signifies a sale of 100 shares at that price, thus: X.158½.

When more than 100 shares are sold, the number of shares sold will precede the price, thus: X.2.158½.

In times of extreme activity, and after the opening prices on stocks have been printed on the tape, all except the final full figures may be dropped in printing quotations, i.e., in printing 100 shares of Steel at 158½ it will read "X8½." If 800 shares are sold at 158½ it will read "X8S8½," so that the number of shares sold will not conflict with the prices.

Sales of stocks dealt in on 10-share unit basis at Post 30 will be designated by the letters SS in printing the same on tape.

Odd lots (on figure line) of stocks dealt in on a 100-share unit basis will be designated by the letters SHRS when printed on tape.

An offer alone, without a bid, is preceded by an O and a dot, thus: X. O. 158½.

A bid alone, without an offer, is followed by the letter, B, thus: X.158½B.

When a sale is not reported in its proper place, the price will be preceded by the abbreviation SLD, thus: X. SLD. 158½.

When the amount sold and the price are so nearly alike that they may be taken for two sales the amount of the sale will be followed by the letter S thus: TCN.4S6, meaning 400 shares at 6.

When an error has been made by the reporter, or in printing, the last letter or figure is repeated several times, indicating that the quotation is to be thrown out, thus: X. 158½½½½½.

In closing prices of active stocks, BR 40C. 6C indicates 40 is bid for an odd lot and an odd lot is offered at 46.

Three-day contracts will be printed thus: X. 158½ 3 days.

At fourteen minutes after 2:00 P.M. the words "Delivery Time" will be printed on the tape, and, shortly after, the lever of the instrument will give fifteen distinct beats. At the end of the fifteenth beat, it is 2:15 P.M., and the close of the recognized time for the settlement of transactions.

Bonds of companies that have no abbreviations on the card will be abbreviated as plainly as possible, and all will be printed with the bond designation added, as per "Words and Phrases" list. A single price after the abbreviation of a bond indicates the sale of a \$1,000 bond at that price.

Transactions in U. S. Government Bonds made in variations of not less than one thirty-second of 1% are printed as follows: A sale at 99 and 13-32nds appears as 99.13.

When a stock and bond have the same abbreviation, the abbreviation is listed only under "Stock Abbreviations."

When a stock is listed bearing the same or a similar name (known as a new stock) it will be printed as the old abbreviation followed by the letter .N unless a new abbreviation is otherwise designated.

TERMS USED IN TICKER REPORTING

Class A	A	Full Paid	FPD
Adjustment	AJ	General Mortgage	GM
Assented	ASST	Land Grant	GNT
Bonds, Class B, or (on figure line) Bid		Guaranteed	GTD
or buyer	B	First	I
Cash (on figure line)	C	Second	II
In closing prices (signifies Odd-Lot)	C	Third	III
Collateral Trust	CLT	Improvement	IMP
Consolidated	CN	Income	IN
Certificates	CT	Leased Line	LL
Convertible	CV	Modified Guaranteed	MG
Debenture or Division	D	Mortgage	MTG
Delayed Delivery	DD	New (See page 00)	N
Extended or Extension	EXT	Next Day's Delivery	ND
Funding	FD	Non-voting	NN

APPENDIX D, TERMS USED IN TICKER REPORTING 789

Offered (on figure line)	O	Odd Lots (100-Share Basis) (on figure line)	SHRS
Opening of Books	OB	Odd Lots (10-Share Basis) (on figure line) SS	
Preferred	Pr	Stamped	STMPD
Prior or Participating Preferred	P Pr	Terminal	T
Rights	R	Tax Exempt	TE
Receipt	RCT	Unified	UN
Real Estate	RE	When Issued	WI
Registered	REG	With Warrants	WW
Shares (on figure line)	S	Ex-coupon dividend or interest	X
Small Bonds	SB	Without Warrants	XW
Sinking Fund	SF		

STOCKS LISTED ON THE NEW YORK STOCK EXCHANGE

Arranged Alphabetically According to NAMES of the STOCKS

List as of September 23, 1929

A

Abitibi Power & Paper Co.	ABI	American Home Products Corp.	AHO
Abraham & Straus, Inc.	AST	American Ice Co.	IS
Abraham & Straus, Inc., Pfd.	AST Pr	American International Corp.	AL
Adams Express Co.	AE	Am.-La France & Foamite Corp.	AFG
Adams-Millis Corp.	ALL	Am.-La France & Foamite Corp., Pfd.	AFG Pr
Advance-Rumely Co.	RX	American Locomotive Co.	ALO
Ahumada Lead Co.	AUA	Amer. Mach. & Foundry	AFX
Air Reduction Co.	ADN	Amer. Mach. & Foundry, Pfd.	AFX Pr
Air-Way Elec. Appliance Corp.	AWY	American Metal Co., Ltd.	AMM
Ajax Rubber Co., Inc.	AJ	Amer. Natural Gas Corp., Pfd.	AGN Pr
Alabama & Vicksburg Ry. Co.	ALM	American Piano Co.	AMP
Alaska Juneau Gold Mining Co.	JU	American Piano Co., Pfd.	AMP Pr
Albany & Susquehanna R. R.	AQS	American Power & Light Co.	AOW
Albany Perf. Wrap. Paper Co.	ABP	Amer. Rad. & Standard Sanitary Corp.	ADT
Alleghany Corporation	YYY	Amer. Rad. & Stand. Sanitary Corp., Pfd.	ADT Pr
Allegheny & Western Ry. (Gtd.)	AY	American Republics Corp.	ARU
Alliance Realty Corp.	ANR	Amer. Rolling Mill Co. (The)	AGM
Allied Chemical & Dye Corp.	ACD	American Safety Razor Corp.	ARZ
Allis Chalmers Mfg. Co.	AH	American Seating Co.	AMZ
Amalgamated Leather Co's., Inc.	ALR	Amer. Ship & Commerce Corp.	ACS
Amerada Corp.	ARC	American Shipbuilding Co.	ASU
Amer. Agricultural Chem. Co.	AGR	Amer. Smelting & Refining Co.	AR
American & Foreign Power Co.	AFW	American Snuff Co.	SNU
Am. & Foreign Pwr. Co., \$6 Pfd.	AFW Pr	American Snuff Co. Pfd.	SNU Pr
Am. & For. Pwr. Co., \$7 2nd Pfd.	AFW Pr	American Steel Foundries	FJ
Am. & For. Pwr. Co., \$7 2nd Pfd.	AFW Pr	American Steel Foundries, Pfd.	FJ Pr
American Bank Note Co.	ABN	American Stores Company	ASC
American Bank Note Co., Pfd.	ABN Pr	American Sugar Refining Co.	ASR
American Beet Sugar Co.	ABS	Amer. Sumatra Tobacco Corp.	AMS
American Bosch Magneto Corp.	BOS	American Telegraph & Cable Co.	ACE
American Brake Shoe & Foundry	ABK	American Tel. & Tel. Co.	ATT
Am. Brake Shoe & Fdy. Co. Pfd.	ABK Pr	American Tobacco Co.	AT
Amer. Brown Boveri Elec. Corp.	BOV	American Tobacco, "B" Stock	ATB
Am. Brown Bov. El. Corp. Pfd.	BOV Pr	American Type Founders	TY
American Can Co.	AC	American Type Founders, Pfd.	TY Pr
American Car & Foundry Co.	AF	Amer. Water W. & El. Co., Inc.	AWW
American Chain Company	ACN	American Woolen Co. of Mass.	WY
American Chiclé Co.	ACJ	American Writing Paper Co.	AW
American Coal Co. of Allegany	ACL	Amer. Zinc, Lead & Smelting Co.	ZA
American Com. Alcohol Corp.	ACF	Anaconda Copper Mining Co.	C
Amer. Encaustic Tiling Co. (Ltd.)	AEN	Anaconda Wire & Cable Co.	AWC
Amer.-European Securities Co.	AMU	Anchor Cap Corp.	ACC
American Express Co.	AMX	Andes Copper Mining Co.	ADE
American-Hawaiian Steamship	AHS	Ann Arbor R. R. Co.	AN
American Hide & Leather Co.	HI	Archer-Daniels-Midland	ADD
		Archer-Daniels-Midland, Pfd.	ADD Pr

Armour & Co., of Delaware	AMD
Armour & Co. (Illinois)	AM
Arnold Constable Corp.	ACT
Art Metal Construction Co.	ART
Artloom Corporation	ARR
Artloom Corporation, Pfd.	ARR Pr
Assoc. Apparel Industries, Inc.	APP
Associated Dry Goods Corp.	DG
Associated Oil Co.	ADO
Atchison, Topeka & Santa Fe Ry.	A
Atlantic Coast Line R. R.	AX
Atl. Gulf & W. Indies S. S. Lines	AG
Atlantic Refining Co.	AFI
Atlas Powder Co.	APW
Atlas Powder Co., Pfd.	APW Pr
Atlas Tack Corp.	AKO
Auburn Automobile Co.	AAC
Austin, Nichols & Co.	ANO
Austrian Credit-Anstalt	ACR
Auto Sales Corp.	AU
AutoStrop Safety Razor Co., Inc.	AUZ
Aviation Corp. (The)	AVC

B

Baldwin Loco. Works (The)	B
Baldwin Loco. Works (The), Pfd.	B Pr
Baltimore & Ohio	BO
Bamberger (L) & Co., Pfd.	BG Pr
Bangor & Aroostook R.R.	BNK
Bangor & Aroostook R.R., Pfd.	BNK Pr
Bank Stocks (See page 811)	—
Barker Bros. Corp.	BKR
Barnet Leather Co.	BLR
Barnet Leather Co., Pfd.	BLR Pr
Barnsdall Corporation	BDL
Bayuk Cigars	BY
Bayuk Cigars, Pfd.	BY Pr
Beacon Oil Co.	BCD
Beatrice Creamery Co.	BRY
Beech Creek R. R.	BCH
Beech-Nut Packing	BNU
Belding-Heminway Co.	BV
Belgian National Rys.	BLW
Bendix Aviation Corp.	BEX
Best & Co., Inc.	BST
Bethlehem Steel	BS
Bloomington Bros., Inc.	BBL
Bloomington Bros., Inc., Pfd.	BBL Pr
Blumenthal & Co., (Sidney) Pfd.	SBM Pr
Bohn Aluminum & Brass Corp.	BHL
Bon Ami Co. (The)	BM
Booth Fisheries Co.	BF
Borden Company (The)	BDO
Borg-Warner Corp.	BGW
Boston & Maine R. R.	BMR
Botany Consolidated Mills, Inc.	BTY
Briggs & Stratton Corp.	BGG
Briggs Manufacturing Co.	BGI
Bristol-Myers Co.	BMV
British Empire Steel	BMP
Brookway Motor Truck Corp.	BKM
Brooklyn & Queens Trans. Corp.	BQT
Brooklyn Edison Co.	BE
Brooklyn-Manhattan Transit Corp.	BMT
Brooklyn Union Gas	BU
Brown Shoe Co.	BW
Brown Shoe Co., 7% Pfd.	BW Pr

Brunswick-Balke-Collender Co.	BCC
Brunswick Term. & Ry. Sec. Co.	BK
Bucyrus-Erie Co., Com.	BEY
Bucyrus-Erie Co., Conv. Pref.	BEY
Bucyrus-Erie Co., Pfd.	BEY Pr
Buffalo & Susq. R. R.	BFQ
Buffalo & Susq. R. R., Pfd.	BFQ Pr
Buffalo, Roch. & Pitts. Ry.	BR
Bullard Company (The)	BUD
Burns Bros., ("A & B")	BB
Burns Bros., Pfd.	BB Pr
Burroughs Adding Machine Co.	BGH
Bush Terminal Bldgs. Co., Pfd.	BHB Pr
Bush Terminal Co.	BH
Bush Term. Co. Deb. Stock	BHD
Butte & Superior Mining	BT
Butte Copper & Zinc Co.	BC
Butterick Co.	BCK
Byers Co. (A. M.)	ABY
Byers Co. (A. M.) Pfd.	ABY Pr
By-Products Coke Corp.	BYC

C

California Packing Corp.	CFF
California Petroleum Corp.	CPU
Callahan Zinc-Lead Co.	CLM
Calumet & Arizona Mining Co.	CMM
Calumet & Hecla Cons. Cop. Co.	CAH
Campbell, Wyant & Cannon Foundry Co.	CWT
Canada Dry Ginger Ale, Inc.	DGL
Canada Southern Ry.	CSA
Canadian Pacific Ry. Co.	CP
Cannon Mills Co.	CAM
Carolina, Clinchfield & Ohio Ry.	CCL
Case (J. I.) Co.	CTM
Cavanagh-Dobbs, Inc.	CVD
Celotex Co. (The)	CLO
Central Aguirre Associates	CEG
Central Alloy Steel Corp.	CES
Central Alloy Steel Corp., Pfd.	CES Pr
Central Coal & Coke Co.	CKO
Central R. R. of New Jersey	JC
Century Ribbon Mills, Inc.	CTY
Century Ribbon Mills, Inc., Pfd.	CTY Pr
Cerro de Pasco Copper Corp.	CDP
Certain-teed Products Corp.	CRT
Checker Cab Mfg. Corp.	CHC
Chesapeake & Ohio	CO
Chesapeake Corp. (The)	CHK
Chicago & Alton R. R. Co.	ALT
Chicago & Eastern Illinois R. R.	CE
Chicago & Northwestern	NW
Chicago Great Western	GW
Chic. Ind. & Louisville Ry., Pfd.	CIL Pr
Chi., Mil., St. Paul & Pac. R. R.	ST
Chicago Pneumatic Tool Co.	CGG
Chic., Rock Island & Pacific Ry.	RI
Chic., St. Paul, Minn. & Omaha	OM
Chicago Yellow Cab Co.	TKY
Chickasha Cotton Oil Co.	CIK
Childs Co.	CDI
Chile Copper Co.	CHL
Christie, Brown & Co., Ltd.	CHT
Chrysler Corporation	K
Cin., Sandusky & Cleve., Pfd.	CSC Pr
City Ice & Fuel Co.	CFY

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY NAMES 791

City Ice & Fuel Co., Pfd.CFY Pr
City Investing Co.CNV
City Stores Co., CommonCSS
City Stores Co., Class "A"CSS
Cleveland & Pittsburgh, Gtd.PTT
Cleveland & Pitts. Special Gtd.PTT SPL
Cleve., Cin., Chic. & St. L.CC
Cleve., Cin., Chic. & St. L., Pfd.CC Pr
Cluett, Peabody & Co.CLU
Cluett, Peabody & Co., Pfd.CLU Pr
Coca-Cola Co.KO
Coca-Cola International Corp.KOC
Collins & Aikman Corp.CK
Colorado & Southern Ry.CX
Colorado & Southern Ry., Pfd.CX Pr
Colorado Fuel & Iron Co.CF
Colorado Fuel & Iron Co., Pfd.CF Pr
Columbia Gas & Electric Corp.CG
Columbia Graphophone Co., Ltd.CGH
Columbian Carbon CompanyCBN
Commercial Credit Co.CMO
Comm. Credit Co., Cl. A Conv.CMO
Comm. Credit Co., 6½% Pfd.CMO Pr
Comm. Credit Co., 7% 1st Pfd.CMO Pr
Comm. Credit Co., 8% Pfd. B.CMO Pr
Comm. Inv. Tr. Corp. (Com.)CIT
Comm. Inv. Tr. Corp., 6½% Pfd.CIT Pr
Comm. Inv. Tr. Corp., 7% Pfd.CIT Pr
Commercial Solvents Corp.CV
Commonwealth Power Corp.CMP
Conde Nast Publications, Inc.CDD
Congoleum-Nairn, Inc.COG
Congress Cigar Co., Inc.CNG
Conley Tinfoil CorporationCLY
Connecticut Ry. & Lighting Co.CRW
Consolidated Cigar Corp.CGR
Consolidated Cigar Corp., 6½% Pfd.
(w.w.)CGR Pr
Consolidated Cigar Corp., 6½% Pfd.
(x.w.)CGR Pr
Cons. Cigar Corp., 7% Pfd.CGR Pr
Cons. Film Industries, Inc.CFM
Consolidated Gas Co.G
Consolidated Railroads of CubaCCU
Consolidated Textile Corp.CTX
Container Corp. of AmericaCNR
Continental Baking Corp.CI
Continental Bank of N. Y. (The)CTB
Continental Can Co.CH
Continental Can Co., Pfd.CH Pr
Continental Insurance Co.CIS
Continental MotorsCMR
Continental Oil Co. of Del.CLL
Corn Products Refining Co.CFG
Corn Products Refining Co., Pfd.CFG Pr
Coty, Inc.COT
Crex Carpet Co.CRX
Crosley Radio Corp. (The)CR
Crown Cork & Seal Co., Inc.CCK
Crown Willamette P. Co., Pfd.CWW Pr
Crown Zellerbach Crop.CEZ
Crucible Steel Co. of AmericaXA
Cuba Cane Sugar Co.CS
Cuba Company (The)CUB
Cuba Railroad Co., Pfd.CBR Pr
Cuban-American Sugar Co.CSU
Cuban-American Sugar Co., Pfd.CSU Pr
Cuban-Dominican Sugar Corp.DMS

D

Cudahy Packing Co. (The)CUX
Curtis Publishing Co. (The)CPC
Curtiss Aerop. & Motor Co., Inc.CUZ
Curtiss-Wright Corp.CWZ
Cushman's Sons, Inc., 7% Pfd.CHS Pr
Cushman's Sons, Inc., \$8 Pfd.CHS Pr
Cutler-Hammer, Inc.CEH
Cuyamel Fruit CompanyCDF

Davison Chemical Co. (The)D
De Beers Consolidated MinesDB
Debenhams Securities, Ltd.DEM
Deere & Co., Pfd.DER Pr
Delaware & Hudson Co.DH
Delaware, Lack. & Western R. R.DL
Denver & Rio Grande R. R.DGR
Detroit & Mackinac Ry.DET
Detroit Edison Co.DTE
Detroit, Hillsdale & S. W. Ry.DHS
Detroit United Ry.DU
Devoe & Reynolds, Inc.DRS
Devoe & Reynolds, Inc., Pfd.DRS Pr
Diamond Match Co.DN
Dome Mines LimitedDO
Dominion Stores LimitedDOS
Drug, Inc.DRU
Duluth, South Shore & Atl. Ry.DS
Duluth Superior TractionDX
Dunhill International, Inc.DHI
Duplan Silk Corp.DPS
Du Pont de Nemours & Co. (E.I.)DD
Duquesne Light CompanyDQU
Durham Hos. Mills,DHO
Durham Hos. Mills, 7% Pfd.DHO Pr

E

Eastern Rolling Mill Co.ER
Eastman Kodak Co. of N. J.EK
Eastman Kodak Co. of N. J., Pfd.EK Pr
Eaton Axle & Spring Co.ENX
Eitington Schild Co., Inc.EGS
Electric Auto-Lite Co. (The)ELO
Electric Auto-Lite Co. (The), Pfd.ELO Pr
Electric Boat Co.ELB
Electric Power & Light Corp.EL
El. Pwr. & Lt. Corp., (allot cts. full
paid)EL
El. Pwr. & Lt. Corp., (allot cts. 50 %
paid)EL
Electric Pwr. & Lt. Corp., Pfd.EL Pr
Electric Storage BatteryEG
Elk Horn Coal Corp.EH
Elk Horn Coal Corp., Pfd.EH Pr
Emerson BrantinghamEGM
Emporium Capwell Corp. (The)EMP
Endicott JohnsonEJ
Engineers Public Service Co.EPU
Equitable Office Bldg. Corp.EQ
Equitable Office Bldg. Corp., Pfd.EQ Pr
Erie & Pittsburgh R. R.EP
Erie R. R.E
Eureka Vacuum Cleaner Co.EU
Evans Auto Loading Co. (The)Evy
Exchange Buffet Corp.EXY

F

Fair (The)	TF
Fair (The) Pfd.	TF Pr
Fairbanks Co.	FI
Fairbanks Co., Pfd.	FI Pr
Fairbanks, Morse & Co.	FKM
Fairbanks, Morse & Co., Pfd.	FKM Pr
Fashion Park Associates, Inc.	FHP
Federal Light & Traction	FLT
Federal Light & Traction, Pfd.	FLT Pr
Federal Mining & Smelting	FS
Federal Motor Truck Co.	FMT
Federal Water Service Corp.	FWS
Fidel-Phen. Fire Ins. Co. of N. Y.	FPX
Fifth Avenue Bus Sec. Corp.	FV
Filene's (Wm.) Sons Co.	FFL
Filene's (Wm.) Sons Co., Pfd.	FFL Pr
First National Stores, Inc.	FST
Fisk Rubber Co.	FK
Fisk Rubber Co., 1st Pfd.	FK Pr
Fisk Rubber Co., Conv. 1st Pfd.	FK Pr
Fisk Rubber Co., 2nd Pfd.	FK Pr
Fleischmann Company	F
Florsheim Shoe Co. (The)	FLO
Follansbee Brothers Co.	FLZ
Foster Wheeler Corp.	FWC
Foundation Company (The)	FO
Fox Film Corporation	FOX
Franklin Simon Co., Pfd.	FIS Pr
Freeport Texas Co.	FT
Fuller (Geo. A.) & Co.	FL

G

Gabriel Snubber Mfg. Co. (The)	GRR
Gamevell Co. (The)	GAC
Gardner Motor Co., Inc.	GRD
General Amer. Tank Car Corp.	GT
General Asphalt Co.	AS
General Baking Co., Pfd.	GBG Pr
General Bronze Corp.	GLZ
General Cable Corp.	GGN
General Cigar Co.	GY
General Cigar Co., Pfd.	GY Pr
General Electric	GL
General Foods Corp.	GF
General Gas & Electric Corp. (of Del.), (Class A and B)	GGG
General Gas & Electric Corp. (of Del.), Pfd.	GGG Pr
General Ice Cream Corp.	GIP
General Mills, Inc.	GIS
General Motors	GM
General Motors, Debenture Stk.	GMD
General Outdoor Adver. Co., Inc.	GVZ
General Public Service Corp.	GPV
General Railway Signal	GRS
General Railway Signal, Pfd.	GRS Pr
General Refractories Co.	GRX
Gillette Safety Razor Co.	GIL
Gimble Bros., Inc.	GI
Glidden Company	GLN
Glidden Company, Prior Pfd.	GLN P. Pr
Gobel (Adolph), Inc.	GGO
Gold Dust Corp.	GK
Gold & Stock Telegraph Co.	GSX
Goodrich Co. (B. F.)	GG

Goodyear Tire & Rubber Co.	GOR
Gotham Silk Hosiery Co., Inc.	GHM
Goth. S. Hos., Pfd. (without Warr.)	GHM Pr
Gould Coupler Co. (The)	GUC
Graham Paige Motors Corp.	GHR
Granby Cons. Min., Smelt. & Pw.	GB
Grand (F. & W.) 5-10-25¢ Stores	GNW
Grand Union Co. (The)	GUX
Granite City Steel Co.	GRC
Grant (W. T.) Co.	GTY
Great Northern Iron Ore Prop.	OR
Great Northern Ry. Pfd.	GQ
Great Western Sugar Co.	GSW
Great Western Sugar Co., Pfd.	GSW Pr
Green Bay & Western Ry.	GNP
Greene Cananea Copper Co.	GNP
Grigsby-Grunow Co.	GGZ
Guantanamo Sugar Co.	GS
Guantanamo Sugar Co., Pfd.	GS Pr
Gulf, Mobile & Northern	GU
Gulf States Steel Co.	GJ
Gulf States Steel Co., Pfd.	GJ Pr

H

Hackensack Water Co.	HWA
Hahn Department Stores, Inc.	HHN
Hamilton Watch Co., 6% Pfd.	HMW Pr
Hanna Company, Pfd.	HNA Pr
Harbison-Walker Refrac. Co.	HKM
Hartman Corp.	HRT
Havana Electric Railway Co.	HN
Havana Elec. Ry. Co., 6 Pfd.	HN Pr
Hawaiian Pineapple Co., Ltd.	HIP
Hayes Body Corp.	HYB
Helme Co. (G. W.)	GH
Helme Co. (G. W.) Pfd.	GH Pr
Hercules Powder Co.	HPC
Hershey Chocolate Corp.	HSY
Hocking Valley Ry.	HV
Hoe (R.) & Co.	HOO
Holland Furnace Co.	HLN
Hollander & Son (A.), Inc.	HLL
Homestake Mining	HM
Houdaille-Hershey Corp.	HH
Household Finance Corp.	HOF
Household Products, Inc.	HOU
Houston Oil Co.	HO
Howe Sound Co.	HW
Hudson & Manhattan R. R.	HX
Hudson Motor Car Co.	HMT
Hupp Motor Car Corp.	H

I

Illinois Central R. R.	IL
Illinois Cent. R. R. Leased Lines	IL LL
Independent Oil & Gas Co.	IPX
Indian Motorcycle Co.	IMY
Indian Motorcycle Co., Pfd.	IMY Pr
Indian Refining Co.	IRR
Industrial Rayon Corp.	ILR
Ingersoll-Rand Co.	IR
Ingersoll-Rand Co., Pfd.	IR Pr
Inland Steel Company	ILN
Inspiration Cons. Cop. Co.	INS
Interboro Rapid Transit Co.	IRT
Intercontinental Rubber Co.	IRU

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY NAMES 793

International Agr. Corp.**IGL**
 Internatl. Business Mach. Corp.**IMN**
 International Cement Corp.**ICM**
 International Comb. Eng. Corp.**IN**
 International Harvester Co.**HR**
 Internat.-Hydro-Electric System**IPH**
 International Match Corp.**ILM**
 Int. Mercantile Marine Co.**MAR**
 Intl. Nickel Co. of Can., Ltd.**N**
 International Paper Co.**IP**
 International Paper & Pwr. Co.
 (Class A)**IP.A.**
 International Paper & Pwr. Co.
 (Class B)**IP.B.**
 International Paper & Pwr. Co.
 (Class C)**IP.C.**
 International Paper & Pwr. Co.
 (Pfd.)**IP.Pr.N**
 Intl. Printing Ink Corp. (The)**IKN**
 Intl. Printing Ink Corp. (The), Pfd.**IKN Pr**
 Intl. Rys. of Cen. Amer.**IRC**
 Intl. Rys. of Cen. Amer., Pfd.**IRC Pr**
 International Salt Co.**ILS**
 International Shoe Co.**ISS**
 International Silver Co.**INR**
 International Silver Co., Pfd.**INR Pr**
 International Tel. & Tel. Corp.**ITT**
 Interstate Dept. Stores, Inc.**ISD**
 Interstate Dept. Stores, Inc., Pfd.,
 (x.w.)**ISD Pr**
 Interstate Dept. Stores, Inc., Pfd.,
 (w.w.)**ISD Pr**
 Intertype Corporation**IRY**
 Investors Equity Co., Inc.**INQ**
 Iowa Central Ry.**IA**
 Iron Products Corp.**IRO**
 Island Creek Coal Co.**ICR**
 Island Creek Coal Co., Pfd.**ICR Pr**

J

Jewel Tea Co.**JW**
 Johns-Manville Corp.**JMP**
 Johns-Manville Corp., Pfd.**JMP Pr**
 Joliet & Chicago R. R.**JLO**
 Jones Bros. Tea Co.**JOT**
 Jones & Laughlin Steel, Pfd.**JL Pr**
 Jordan Motor Car Co.**JJ**

K

Kansas City Power & Light Co.**KLT**
 Kansas City Southern Ry.**KSU**
 Kaufmann Dept. Stores, Inc.**KKN**
 Kayser & Co. (Julius)**JKS**
 Keith-Albee-Orpheum Corp.**KLO**
 Kelly-Springfield Tire Co.**KK**
 Kelly-Springfield Tire Co., 6% Pfd.**KK Pr**
 Kelly-Springfield Tire Co., 8% Pfd.**KK Pr**
 Kelsey-Hayes Wheel Corp.**KW**
 Kelvinator Corp.**KLV**
 Kendall Co. (The) Pfd.**KLL Pr**
 Kennecott Copper Corp.**KN**
 Kimberly-Clark Corp.**KMB**
 Kinney (G. R.) & Co.**KNX**
 Kinney, (G. R.) & Co., Pfd.**KNX Pr**
 Kolster Radio Corp.**KOR**
 Kraft-Phenix Cheese Corp.**KKR**

Kresge Co. (The S. S.)**KG**
 Kresge Co. (The S. S.) Pfd.**KG Pr**
 Kresge Department Stores**KDS**
 Kresge Department Stores, Pfd.**KDS Pr**
 Kress & Co. (S. H.)**KS**
 Kreuger & Toll Co.**KRT**
 Kroger Gro. & Baking Co. (The)**KR**
 Kuppenheimer (B.) & Co.**BKU**

L

Laclede Gas Light Co. of St. Louis**LG**
 Laclede Gas Light Co. of St. L., Pfd. **LG Pr**
 Lago Oil & Transport Corp.**LGO**
 Lambert Company (The)**LAM**
 Lee Rubber & Tire Corp.**LR**
 Lehigh Portland Cement Co.**LPT**
 Lehigh Portland Cement Co., Pfd.**LPT Pr**
 Lehigh Valley Coal Corp.**LEH**
 Lehigh Valley R. R.**LV**
 Lehn & Fink Products Co.**LNP**
 Libbey-Owens Glass Co.**LBO**
 Liggett & Myers Tobacco**LM**
 Liggett & Myers, "B" Stock**LMB**
 Lima Loco. Works**LMW**
 Link-Belt Company**LB**
 Liquid Carbonic Corp. (The)**LQT**
 Loew's Incorporated**LW**
 Loft Incorporated**LF**
 Long-Bell Lumber Corp.**LQ**
 Loose-Wiles Biscuit Co.**LO**
 Loose-Wiles Biscuit Co., Pfd.**LO Pr**
 Lorillard Co. (P.)**LOR**
 Lorillard Co. (P.), Pfd.**LOR Pr**
 Louisiana Oil Refining Corp.**LL**
 Louisiana Oil Refg. Corp., Pfd.**LL Pr**
 Louisville & Nashville**LN**
 Louisville Gas & Electric Co.**LOU**
 Ludlum Steel**LMS**

M

MacAndrews & Forbes Co**MAF**
 MacAndrews & Forbes Co., Pfd.**MAF Pr**
 Mack Trucks, Inc.**MQ**
 Mackay Companies**MK**
 Macy (R. H.) & Co., Inc.**MZ**
 Madison Square Garden Corp.**MAQ**
 Magma Copper Co.**MMX**
 Mahoning Coal Railroad Co.**MAH**
 Mallinson (H. R.) & Co.**HK**
 Mallinson (H. R.) & Co., Pfd.**HK Pr**
 Manati Sugar Co.**MNU**
 Manati Sugar Co., Pfd.**MNU Pr**
 Mandel Brothers, Inc.**MB**
 Manhattan Electrical Supply Co.**MSY**
 Manhattan Railway**MAN**
 Manhattan Railway, Gtd. (Old)**MAN**
 Manhattan Shirt Co.**MT**
 Manhattan Shirt Co., Pfd.**MT Pr**
 Maracaibo Oil Exploration Co.**MAB**
 Market Street Railway**MRR**
 Marlin-Rockwell Corp.**MR**
 Marmon Motor Car Co.**MMC**
 Martin-Parry Corp.**MRT**
 Mathieson Alkali Works**AKL**
 Mathieson Alkali Works, Pfd.**AKL Pr**
 May Department Stores Co.**MA**

Maytag Co. (The)MYG
 McCall CorporationMW
 McCrory Stores Corp.MRY
 McCrory Stores Corp., Pfd.MRY Pr
 McCrory Stores Corp. "B"MRY
 McGraw-Hill Publishing Co., Inc.MCG
 McIntyre Porcupine MinesMTY
 McKeesport Tin Plate Co. (The)MV
 McKesson & Robbins, Inc.MCK
 McLellan Stores Co.MLL
 Melville Shoe CorporationMES
 Mengel Company (The)MGX
 Mengel Company (The), Pfd.MGX Pr
 Metro-Goldwyn PicturesMGL
 Mexican Northern Ry.MNO
 Mexican Petroleum Co., Ltd.MN
 Mexican Seaboard OilMSX
 Miami Copper Co.MMP
 Michigan Central R. R.MC
 Michigan Steel Corp.MCH
 Mid-Continent Petroleum Corp.MPZ
 Middle States OilMSO
 Midland Steel Products Co.MPO
 Miller Rubber Co. (The)MRC
 Milwaukee El. Ry. & L. Co., Pfd.MY Pr
 Minn.-Honeywell Regulator Co.MHW
 Minneapolis-Moline Power Implement
 Co.MMW
 Minneapolis & St. Louis R. R.MS
 Minn., St. P. & S. S. Marie Ry.MSM
 Minn., St. P. & S. S. M. L. LinesMSM LL
 Minn., St. P. & S. S. M. Ry., Pfd.MSM Pr
 Missouri-Kansas-TexasKT
 Missouri Pacific R. R.MOP
 Mobile & Birmingham R. R., Pfd.M&B Pr
 Mohawk Carpet Mills, Inc.MOK
 Montgomery Ward & Co.M
 Moon Motor Car Co.MOO
 Morrell (John) & Co., Inc.MOL
 Morris & Co., Ltd., Inc. (Philip)MOS
 Morris & Essex R. R.ME
 Mother Lode Coalition Mines Co.MOR
 Motion Picture Capital Corp.MPX
 Moto Meter Gauge Equip. Corp.MQU
 Motor Products Corp.MPS
 Motor Wheel CorporationMRW
 Mullins Manufacturing Corp.MNS
 Mullins Mfg. Corp., Pfd.MNS Pr
 Munsingwear, Inc.MUN
 Murray Corporation of AmericaMUY
 Myers (F. E.) & Bro. Co. (The)MYR

National Lead Co., Pfd. "B"LT Pr
 National Power & Light Co.NPL
 National Radiator Corp.NRC
 National Rys. of MexicoMX
 National Supply Co.NSC
 National Supply Co., Pfd.NSC Pr
 National Surety Co.NSU
 National Tea CompanyNTY
 Nevada Consolidated CopperNV
 New Orleans, Texas & Mexico Ry.NOX
 Newport Co. (The)NEO
 N. Y. & HarlemHAR
 New York Air Brake Co.AB
 N. Y. CentralCN
 N. Y., Chicago & St. LouisNKP
 New York Dock Co.DK
 N. Y., Lackawanna & WesternNL
 N. Y., N. H. & Hartford R. R. Co.V
 N. Y., Ontario & WesternOW
 N. Y. Railways Corp., Pfd.NRY Pr
 N. Y. State RailwaysNST
 N. Y. Steam Corporation, Pfd.NSM Pr
 Newton Steel Co. (The)NSX
 Nickel Holdings Corp.NNK
 Norfolk & Western Ry. Co.NFK
 Norfolk & Western Ry. Co., Adj. Pfd. NFK Pr
 Norfolk Southern R. R.NS
 North American Co.NA
 North American Edison Co.NAE
 North German Lloyd of BremenNGL
 Northern Central Ry.NNX
 Northern PacificNP
 Northwestern TelegraphNWT
 Norwalk Tire & Rub. Co.NRT
 Norwalk Tire & Rub. Co., Pfd.NRT Pr
 Nunnally CompanyNNY

O

Oil Well Supply CompanyOWY
 Oil Well Supply Company, Pfd.OWY Pr
 Oliver Farm Equipment Co.OF
 Omnibus Corporation (The)BUZ
 Oppenheim, Collins & Co., Inc.OPS
 Orpheum CircuitOPX
 Otis Elevator Co.OT
 Otis Elevator Co., Pfd.OT Pr
 Otis Steel Co.OST
 Outlet Company (The)OTU
 Outlet Co. (The), Pfd.OTU Pr
 Owens-Illinois Glass Co.OB

N

Nash Motors Co.NSS
 Nashville, Chattanooga & St. L.CHA
 National Acme Co.NCM
 National Air Transport, Inc.NAS
 National Bellas Hess Co., Inc.NBH
 National BiscuitBI
 National Cash Register Co. (The)NCR
 National Dairy Products Corp.NPT
 National Dept. Stores, Inc.NX
 National Dept. Stores, Inc., Pfd.NX Pr
 National Distillers Prod. Corp.NAD
 National Enameling & StampingEGK
 National Lead Co.LT
 National Lead Co., Pfd. "A"LT Pr

P

Pacific Coast Co.PX
 Pacific Coast Co., 1st Pfd.PX Pr
 Pacific Coast Co., 2nd Pfd.PX Pr
 Pacific Gas & Elec. Co.PCG
 Pacific Lighting Corp.PLT
 Pacific MillsPFS
 Pacific OilPY
 Pacific Tel. & Tel. Co.PAC
 Packard Motor Car Co.PAK
 Pan-American Pet. & Trans. Co.PP
 Pan-Am. Pet. & Trans. Co., Class BPPB
 Pan-Amer. Western Pet. Co.PPW
 Panhandle Prod. & Refining Co.PDF
 Paramount Famous Lasky Corp.FP

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY NAMES 795

Park & TilfordPKT
 Park Utah Cons. Mines Co.PUC
 Pathe Exchange, Inc.PTH
 Patino Mines & EnterprisesPAE
 Peerless Motor Car Corp.PSS
 Penick & Ford, Ltd., Inc.PFK
 Penick & Ford, Ltd., Inc., Pfd.PFK Pr
 Pennsylvania Coal & Coke Corp.PVX
 Penna.-Dixie Cement Corp.PXC
 Pennsylvania R. R.PA
 Peoples Gas Lt. & Coke Co.PO
 Peoria & Eastern Ry.PE
 Pere Marquette R. R.PQ
 Pere Marquette, Prior Pfd.PQR
 Pet Milk Co.PET
 Phelps Dodge Corp.PDO
 Philadelphia Co.PH
 Philadelphia Co., 5% Pfd.PH Pr
 Philadelphia Co., 6% Pfd.PH Pr
 Philadelphia Rapid TransitPV
 Phila. & Reading Coal & Iron Corp.PRC
 Phillips-Jones Corp.PJ
 Phillips-Jones Corp., Pfd.PJ Pr
 Phillips Petroleum Co.P
 Phoenix Hosiery Co.PXY
 Phoenix Hosiery Co., Pfd.PXY Pr
 Pierce Arrow Motor Car Co.PZ
 Pierce Oil Corp.POL
 Pierce Petroleum Corp.PPX
 Pillsbury Flour Mills, Inc.PSY
 Pirelli Co. of ItalyPRL
 Pittsburgh & West Va. Ry.PW
 Pitts., Cin., Chic. & St. L. R. R.PT
 Pittsburgh Coal Co. (of Penna.)PC
 Pitts., Ft. Wayne & ChicagoFW
 Pitts., McKeesport & YoughPMY
 Pittsburgh Screw & Bolt Corp.PIT
 Pittsburgh Steel Co., Pfd.PG Pr
 Pittsburgh Term. Coal Corp.PPT
 Pittsburgh Term. Coal Corp., Pfd.PPT Pr
 Pitts., Youngstown & Ash., Pfd.PYA.Pr
 Poor & CompanyPOR
 Porto Rican-Amer. Tobacco Co.PRT
 Postal Telegraph & Cable Corp.PST
 Prairie Oil & Gas Co. (The)PF
 Prairie Pipe Line Co. (The)PPI
 Pressed Steel Car Co.PSL
 Procter & Gamble Co. (The)PGM
 Producers & Refiners Corp.PFN
 Producers & Refiners Corp., Pfd.PFN Pr
 Pro-phy-lac-tic Brush Co.PYV
 Public Service Corp. of N. J.PUB
 Public Service Electric & Gas Co.PEG
 Pullman, Inc.PU
 Punta Alegre Sugar Co.POS
 Pure Oil Co.PUY
 Pure Oil Co., Pfd.PUY Pr
 Purity Bakeries Corp.PTY

R

Radio Corporation of AmericaR
 Radio-Keith-Orpheum Corp.RKK
 R. R. Securs. Co., Ill. Cent. StockRSY
 Railway & Express Co.ARX
 Rand MinesRDM
 Raybestos-Manhattan, Inc.RAY
 Reading Co.RDG

Real Silk Hosiery Mills, Inc.RSH
 Real Silk Hosiery Mills, Inc., Pfd.RSH Pr
 Reis & Co. (Robert)RIS
 Remington Rand, Inc.RR
 Remington Typewriter Co., Pfd.REM Pr
 Rensselaer & Saratoga R. R.RNS
 Reo Motor Car Co.RY
 Republic Brass Corp.RB
 Republic Iron & SteelRBC
 Reynolds Spring Co.RSA
 Reynolds (R. J.) Tobacco Co.RJR
 Reynolds (R. J.) Tob. Co. ("B")RJR
 Rhine-Westphalia El. Pwr. Corp.RWE
 Richfield Oil Co. of CaliforniaRIL
 Rio Grande Oil Co.RGO
 Ritter Dental Mfg. Co., Inc.RDL
 Rossia Insurance Co. of AmericaROS
 Royal Baking Powder Co.RBP
 Royal Dutch, N. Y. SharesRD
 Rutland R. R.RV

S

Safeway Stores, Inc.SAF
 Safeway Stores, Inc., 6% Pfd.SAF Pr
 Safeway Stores, Inc., 7% Pfd.SAF Pr
 St. Joseph Lead Co.JO
 St. Louis-San Francisco R. R.FN
 St. Louis & Southwestern R. R.SS
 Savage ArmsSA
 Schulte Retail Stores Corp.SHO
 Schulte Retail Stores Corp., Pfd.SHO Pr
 Scott Paper Co.SPP
 Seaboard Air LineSE
 Seagrave Corporation (The)SVE
 Sears, Roebuck & Co.S
 Second Natl. Investors Corp.SNI
 Seneca Copper Mining Co.SEN
 Serval, Inc.SVL
 Sharon Steel Hoop Co.SSH
 Sharp & Dohme, Inc.SDH
 Shattuck Co. (Frank G.)FHK
 Shell Transp. & Trad. Co., Ltd.SH
 Shell Union Oil Corp.SUX
 Shubert Theatre CorporationSHU
 Simmons CompanySIM
 Simms Petroleum Co.SV
 Sinclair Consol. Oil Corp.SC
 Sixth Ave. R. R.SAV
 Skelly Oil Co.SYE
 Sloss Sheffield Steel & IronSLS
 Snider Packing Corp.SNR
 Solvay American Inv. Corp.SO
 Southern California Edison Co.SCE
 Southern Dairies, Inc.SD
 Southern PacificSX
 Southern Railway Co.SZ
 Southern Ry. (Mobile & O. Ctfs.)SRM
 South Porto Rico SugarPSU
 South Porto Rico Sugar, Pfd.PSU Pr
 Spalding (A. G.) & Bros.SDG
 Spalding (A. G.) & Bros., Pfd.SDG Pr
 Spang, Chalfant & Co., Inc.SCH
 Spang, Chalfant & Co., Inc., Pfd.SCH Pr
 Sparks-Withington Co. (The)SKW
 Spear & CompanySST
 Spencer Kellogg & Sons, Inc.SK
 Spicer Mfg. Corp.SSY

Spiegel, May, Stern Co., Inc.SMS
 Standard Brands IncorporatedSBX
 Standard Com. Tobacco Co.SDT
 Standard Gas & Electric Co.SG
 Standard Investing Corp.STD
 Standard MillingSM
 Standard Milling, Pfd.SM Pr
 Standard Oil Co. of CaliforniaSCD
 Standard Oil Co. of New JerseyJ
 Standard Oil Co. of N. Y.NY
 Standard Plate Glass Co.SGL
 Standard Plate Glass Co., Pfd.SGL Pr
 Stanley Company of AmericaSTA
 Sterling Securities Corp.SLG
 Stewart-Warner Corp.STX
 Stone & Webster, Inc.SW
 Studebaker Corp.STU
 Studebaker Corp., Pfd.STU Pr
 Submarine Boat Corp.SUB
 Sun Oil CompanySUN
 Sun Oil Company, Pfd.SUN Pr
 Superior OilSI
 Superior SteelSSU
 Sweets Co. of America, Inc.SWA
 Symington Company, (The)SYZ

T

Telaugraph CorporationTZ
 Tennessee Copper & Chem. Corp.TCC
 Texas & Pacific Ry.T
 Texas Corp. (The)TX
 Texas Gulf Sulphur Co.TG
 Texas Pacific Coal & Oil Co.TES
 Texas Pacific Land Trust (New)TXL
 Texas Pacific Land Trust (Old)TXL
 Thatcher Manufacturing Co.TCH
 Third Ave. Ry.TAV
 Thompson (John R.) Co.THM
 Tide Water Oil Co.TV
 Tide Water Assoc. Oil Co. (New)TV
 Timken-Detroit Axle Co. (The)TDX
 Timken Roller Bearing Co.TKR
 Tobacco Products Corp.TB
 Tobacco Prod. Corp. (Div. Ctifs.)TBS
 Toledo, Peoria & Western R. R.TP
 Toledo Railways & Light Co.TD
 Transcontinental Oil Co.TCN
 Transue & Williams Stl. Frg. Corp.TU
 Trico Products Corp.TCO
 Truax-Traer Coal Co.TTC
 Truscon Steel Co.TUX
 Twin City Rap. Tr. Co.TWC
 Twin City Rap. Tr. Co., Pfd.TWC Pr

U

Underwood Elliott Fisher Co.UNX
 Underwood Elliott Fisher Co., Pfd.UNX Pr
 Union Bag & Paper Corp.BP
 Union Carbide & Carbon Corp.UNC
 Union Oil of CaliforniaUCL
 Union Pacific R. R. Co.UP
 Union Pacific R. R., Co., Pfd.UP Pr
 Union Tank CarUTX
 United Aircraft Trans. Corp.UAF
 United Biscuit Co. of AmericaUBC
 United Business Publishers, Inc.UBP

United Carbon Co.UCB
 United Cigar StoresUC
 United Corporation (The)U
 United DyewoodUDY
 United Elec. Coal CompaniesUEL
 United Fruit Co.UF
 United Gas Imp. Co. (The)UGI
 United PaperboardPB
 United Piece Dye Works (The)UW
 U. S. Distributing Corp.UM
 U. S. Express Co.USX
 U. S. & Foreign Securities Corp.UFO
 U. S. Freight Co.UFG
 U. S. Hoffman Machinery Corp.HMY
 U. S. Industrial Alcohol Co.UD
 U. S. Leather Co. (The)UX
 U. S. Pipe & Foundry Co.CJ
 U. S. Realty & ImprovementUZ
 U. S. Rubber Co.RU
 U. S. Smelting, Refining & Min.UV
 U. S. SteelX
 U. S. Steel, Pfd.X Pr
 U. S. Tobacco Co.UB
 U. S. Tobacco Co., Pfd.UB Pr
 Universal Leaf Tobacco Co., Inc.UVV
 Univer. Leaf Tob. Co., Inc., Pfd.UVV Pr
 Universal Pictures Co., Inc., Pfd.UVP Pr
 Universal Pipe & Radiator Co.UVX
 Univ. Pipe & Radiator Co., Pfd.UVX Pr
 Utah CopperUE
 Utilities Power & Light Corp.ULA

V

Vadeco Sales Corp.VAD
 Vanadium Corp. of Amer.VA
 Van Raalte Co.VRT
 Van Raalte Co., Pfd.VRT Pr
 Vick Chemical Co.VIK
 Vicksburg, Shreve, & Pac. Ry. Co.VKS
 Virginia-Carolina ChemicalVC
 Virginia Electric & PowerVE
 Virginia Iron, Coal & CokeVK
 Virginia Iron, Coal & Coke, Pfd.VK Pr
 Vulcan Detinning Co.VX

W

Wabash Ry.WA
 Waldorf System, Inc.WXY
 Walgreen CompanyWAG
 Walworth CompanyWAL
 Ward Baking Corp. (Class A)WD
 Ward Baking Corp. (Class B)WD
 Ward Baking Corp., 7% Pfd.WD Pr
 Warner Bros. Pictures Co.WBP
 Warner-Quinlan Co.QW
 Warren Brothers Co.WAR
 Warren Brothers Co., Pfd.WAR Pr
 Warren Foundry & Pipe Corp.WFP
 Webster Eisenlohr, Inc.WBS
 Wells Fargo & Co.WF
 Wesson Oil & Snowdrift Co., Inc.WNO
 West Penn. Electric Co.WEP
 West Penn. Power Co., Pfd.WPP Pr
 Western Dairy Products Co.WYY
 Western Maryland Ry.WM
 Western Pacific R. R. Corp.WR

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY NAMES 797

Western Union Telegraph Co.W
Westinghouse Air Bk. Co. (The)WKM
Westinghouse Elec. & Mfg. Co.WX
Westinghouse El. & Mfg. Co., Pfd.WX Pr
Weston Elec. Instrument Corp.WZ
Westvaco Chlorine Products Co.WCO
Wextark Radio Stores, Inc.WKK
Wheeling & Lake Erie Ry.WL
White Eagle Oil & Refining Co.WEO
White Motor Co.WHI
White Rock Mineral Springs Co.WHR
White Sewing Machine Corp.WSW
Wilcox (H. F.) Oil & Gas Co.WXC
Wilcox-Rich CorporationWLX
Willys OverlandOV
Wilson & Co., Inc.WIL

Wisconsin Central Ry.WC
Woolworth & Co. (F. W.)Z
Worthington Pump & Mach. Corp.WPU
Wright Aeronautical Corp.WAC
Wrigley, Jr. & Co. (Wm.)WWY

Y

Yale & Towne Mfg. Co. (The)YA
Yellow Truck & Coach Mfg. Co.YC
Young (L. A.) Spring & Wire Corp.YG
Youngstown Sheet & Tube Co.YB

Z

Zenith Radio Corp.ZE

STOCKS LISTED ON THE NEW YORK STOCK EXCHANGE

Arranged Alphabetically According to SYMBOLS

List as of September 23, 1929

A

Atchison, Topeka & Santa Fe Ry.A
Auburn Automobile Co.AAC
New York Air Brake Co.AB
Abitibi Power & Paper Co.ABI
American Brake Shoe & FoundryABK
Amer. Brake Shoe & Fdy., Pfd.ABK Pr
American Bank Note Co.ABN
American Bank Note Co., Pfd.ABN Pr
Albany Perf. Wrap. Paper Co.ABP
American Beet Sugar Co.ABS
Byers Co. (A. M.)ABY
Byers Co. (A. M.), Pfd.ABY Pr
American Can Co.AC
Anchor Cap Corp.ACC
Allied Chemical & Dye Corp.ACD
American Telegraph & Cable Co.ACE
American Com. Alcohol Corp.ACF
American Chiclé Co.ACJ
American Coal Co. of AlleganyACL
American Chain CompanyACN
Austrian Credit-AnstaltACR
Amer. Ship & Commerce Corp.ACS
Arnold Constable Corp.ACT
Archer-Daniels-Midland Co.ADD
Archer-Daniels-Midland Co., Pfd.ADD Pr
Andes Copper Mining Co.ADE
Air Reduction Co.ADN
Associated Oil Co.ADO
Am. Rad. & Stan. Sanitary Corp.ADT
Am. Rad. & Stan. San. Corp., Pfd.ADT Pr
Adams Express Co.AE
Amer. Encaustic Tiling Co. (Ltd.)AEN
American Car & Foundry Co.AF
Am.-La France & Foamite Corp.AFG
Am.-La France & Foamite Corp.,
Pfd.AFG Pr
Atlantic Refining Co.AFI
American & Foreign Power Co.AFW
Am. & Foreign Pwr. Co., \$6 Pfd.AFW Pr
Am. & Foreign Pwr. Co., Pfd.AFW Pr
Am. & For. Pwr. Co., \$7 2nd Pfd.AFW Pr
Amer. Mach. & FoundryAFX

Amer. Mach. & Foundry, Pfd.AFX Pr
Atl. Gulf & W. Indies S. S. LinesAG
Amer. Rolling Mill Co. (The)AGM
Amer. Natural Gas Corp., Pfd.AGN Pr
Amer. Agricultural Chem. Co.AGR
Allis Chalmers Mfg. Co.AH
American Home Products Corp.AHO
Amer.-Hawaiian Steamship Co.AHS
Ajax Rubber Co.AJ
Mathieson Alkali WorksAKL
Mathieson Alkali Works, Pfd.AKL Pr
Atlas Tack Corp.AKO
American International Corp.AL
Adams-Millis Corp.ALL
Alabama & Vicksburg Ry. Co.ALM
American Locomotive Co.ALO
Amalgamated Leather Co's., Inc.ALR
Chicago & Alton R. R. Co.ALT
Armour & Co. (Illinois)AM
Armour & Co. of DelawareAMD
American Metal Co., Ltd.AMM
American Piano Co.AMP
American Piano Co., Pfd.AMP Pr
Amer. Sumatra Tobacco Corp.AMS
Amer.-European Securities Co.AMU
American Express Co.AMX
American Seating Co.AMZ
Ann Arbor R. R. Co.AN
Austin, Nichols & Co.ANO
Alliance Realty Co.ANR
American Power & Light Co.AOW
Assoc. Apparel Industries, Inc.APP
Atlas Powder Co.APW
Atlas Powder Company, Pfd.APW Pr
Albany & Susquehanna R. R.AQS
American Smelting & Ref. Co.AR
Amerada Corp.ARC
Artloom CorporationARR
Artloom Corporation, Pfd.ARR Pr
Art Metal Construction Co.ART
American Republics Corp.ARU
Railway & Express Co.ARX
American Safety Razor Corp.ARZ
General Asphalt Co.AS

American Stores CompanyASC
 American Sugar Refining Co.ASR
 Abraham & Straus, Inc.AST
 Abraham & Straus, Inc., Pfd.AST Pr
 American Shipbuilding Co.ASU
 American Tobacco Co.AT
 American Tobacco Co., "B" Stock ..ATB
 American Tel. & Tel. Co.ATT
 Auto Sales Corp.AU
 Ahumada Lead CompanyAUA
 AutoStrop Safety Razor Co., Inc.AUZ
 Aviation Corp. (The)AVC
 American Writing Paper Co.AW
 Anaconda Wire & Cable Co.AWC
 Amer. Water W. & El. Co., Inc.AWW
 Air-Way Elec. Appliance Co.AWY
 Atlantic Coast Line R. R.AX
 Allegheny & Western Ry. (Gtd.)AY
 Alleghany CorporationAYY

B

Baldwin Loco. Works (The)B
 Baldwin Loco. Works (The), Pfd.B Pr
 Burns Bros. ("A & B")BB
 Burns Bros., Pfd.BB Pr
 Bloomingdale Bros., Inc.BBL
 Bloomingdale Bros., Inc., Pfd.BBL Pr
 Butte Copper & ZincBC
 Brunswick-Balke-Collender Co.BCC
 Beacon Oil Co.BCD
 Beech Creek R. R. Co.BCH
 Butterick Co.BCK
 Barnsdall CorporationBDL
 Borden Company (The)BDO
 Brooklyn Edison Co.BE
 Bendix Aviation Corp.BEX
 Bucyrus-Erie Co., Com.BEY
 Bucyrus-Erie Co., Conv. Pref.BEY
 Bucyrus-Erie Co., Pfd.BEY Pr
 Booth Fisheries Co.BF
 Buffalo & Susq. R. R. Corp.BFQ
 Buffalo & Susq. R. R. Corp., Pfd.BFQ Pr
 Bamberger (L.) & Co., Pfd.BG Pr
 Briggs & Stratton Corp.BGG
 Borroughs Adding Machine Co.BGH
 Briggs Manufacturing Co.BGI
 Borg-Warner Corp.BGW
 Bush Terminal Co.BH
 Bush Terminal Bldgs. Co., Pfd.BHB Pr
 Bush Term. Co., Deb. StockBHD
 Bohn Aluminum & Brass Corp.BHL
 National BiscuitBI
 Brunswick Term. & Ry. Sec. Co.BK
 Brockway Motor Truck Corp.BKM
 Barker Bros. Corp.BKR
 Kuppenheimer, (B) & Co.BKU
 Barnet Leather Co.BLR
 Barnet Leather Co., Pfd.BLR Pr
 Belgian National Rys.BLW
 Bon Ami Co. (The)BM
 British Empire SteelBMP
 Boston & Maine R. R.BMR
 Brooklyn-Manhattan Transit Corp.BMT
 Bristol-Myers Co.BMY
 Bangor & Aroostook R. R.BNK
 Bangor & Aroostook R. R., Pfd.BNK Pr
 Beech-Nut PackingBNU

Baltimore & OhioBO
 American Bosch MagnetoBOS
 Am. Brown Boveri Elec. Corp.BOV
 Am. Brown Bov. El. Corp., Pfd.BOV Pr
 Union Bag & Paper Corp.BP
 Brooklyn & Queens Trans. Corp.BQT
 Buffalo, Roch. & Pitts. Ry.BR
 Beatrice Creamery Co.BRY
 Bethlehem SteelBS
 Best & Co., Inc.BST
 Butte & Superior MiningBT
 Botany Consolidated Mills, Inc.BTY
 Brooklyn Union GasBU
 Bullard Company (The)BUD
 Omnibus Corporation (The)BUZ
 Belding-Heminway Co.BV
 Brown Shoe Co.BW
 Brown Shoe Co., 7% Pfd.BW Pr
 Bayuk CigarsBY
 Bayuk Cigars, Pfd.BY Pr
 By-Products Coke Corp.BYC
 Bank Stocks (See Page 811)

C

Anaconda Copper Mining Co.C
 Calumet & Hecla Cons. Cop. Co.CAH
 Cannon Mills Co.CAM
 Columbian Carbon Co.CBN
 Cuba Railroad Co., Pfd.CBR Pr
 Cleve., Cin., Chi. & St. L.CC
 Cleve., Cin., Chi. & St. L., Pfd.CC Pr
 Crown Cork & Seal Co., Inc.CCK
 Carolina, Clinchfield & Ohio Ry.CCL
 Consolidated Railroads of CubaCCU
 Conde Nast Publications, Inc.CDD
 Cuyamel Fruit Co.CDF
 Childs CompanyCDI
 Cerro de Pasco Copper Corp.CDP
 Chicago & Eastern Illinois R. R.CE
 Central Aguirre AssociatesCEG
 Cutler-Hammer, Inc.CEH
 Central Alloy Steel Corp.CES
 Central Alloy Steel Corp., Pfd.CES Pr
 Crown Zellerbach Corp.CEZ
 Colorado Fuel & Iron Co.CF
 Colorado Fuel & Iron Co., Pfd.CF Pr
 California Packing Corp.CFF
 Corn Products Refining Co.CFG
 Corn Products Refining Co., Pfd.CFG Pr
 Cons. Film Industries, Inc.CFM
 City Ice & Fuel Co.CFY
 City Ice & Fuel Co., Pfd.CFY Pr
 Columbia Gas & Electric Corp.CG
 Chicago Pneumatic Tool Co.CGG
 Columbia Graphophone Co., Ltd.CGH
 Consolidated Cigar Co.CGR
 Cons. Cigar Corp., 6½% Pfd. (w.w.) CGR Pr
 Cons. Cigar Corp., 6½% Pfd., (x.w.) CGR Pr
 Cons. Cigar Corp., 7% Pfd.CGH Pr
 Continental Can Co., Inc.CH
 Continental Can Co., Inc., Pfd.CH Pr
 Nashville, Chattanooga & St. L.CHA
 Checker Cab Mfg. Corp.CHC
 Chesapeake Corp. (The)CHK
 Chile Copper Co.CHL
 Cushman's Sons Inc., 7% Pfd.CHS Pr
 Cushman's Sons, Inc., \$8 Pfd.CHS Pr

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY SYMBOLS 799

Christie, Brown & Co., Ltd.CHT
 Continental Baking Corp.CI
 Chickasha Cotton Oil Co.CIK
 Chic. Ind. & Louisville Ry., Pfd.CIL Pr
 Callahan Zinc-Lead Co.CIM
 Continental Insurance Co.CIS
 Comm. Invest. Tr. Corp. (Com.)CIT
 Comm. Inv. Tr. Corp., 7% Pfd.CIT Pr
 Com. Inv. Tr. Corp., 6½% Pfd.CIT Pr
 U. S. Pipe & Foundry Co.CJ
 Collins & Aikman Corp.CK
 Central Coal & Coke Co.CKO
 Continental Oil Co. of Del.CLL
 Celotex Co. (The)CLO
 Cluett, Peabody & Co.CLU
 Cluett, Peabody & Co., Pfd.CLU Pr
 Conley Tinfoil Corp.CLY
 Calumet & Arizona Mining Co.CMM
 Commercial Credit Co.CMO
 Com. Credit Co., Cl. A Conv.CMO
 Com. Credit Co., 6½% Pfd.CMO Pr
 Com. Credit Co., 7% 1st Pfd.CMO Pr
 Com. Credit Co., 8% Pfd. BCMO Pr
 Commonwealth Power Corp.CMP
 Continental MotorsCMR
 New York CentralCN
 Congress Cigar Co., Inc.CNG
 Container Corp. of AmericaCNR
 City Investing Co.CNV
 Chesapeake & OhioCO
 Congoleum-Nairn, Inc.COG
 Coty, Inc.COT
 Canadian Pacific Ry. Co.CP
 Curtis Publishing Co., (The)CPC
 California Petroleum Corp.CPU
 Crosley Radio Corp. (The)CR
 Certain-teed Products Corp.CRT
 Connecticut Ry. & Lighting Co.CRW
 Crex Carpet Co.CRX
 Cuba Cane Sugar Co.CS
 Canada Southern Ry.CSA
 Cin., Sandusky & Cleve., Pfd.CSC Pr
 City Stores Co., CommonCSS
 City Stores Co., Class "A"CSS
 Cuban-American Sugar Co.CSU
 Cuban-American Sugar Co., Pfd.CSU Pr
 Continental Bank of N. Y. (The)CTB
 Case (J. I.), Co.CTM
 Consolidated Textile Corp.CTX
 Century Ribbon Mills, Inc.CTY
 Century Ribbon Mills, Inc., Pfd.CTY Pr
 Cuba Company (The)CUB
 Cudahy Packing Co. (The)CUX
 Curtiss Aerop. & Motor Co., Inc.CUZ
 Commercial Solvents Corp.CV
 Cavanagh-Dobbs, Inc.CVD
 Campbell, Wyant & Cannon Foundry
 Co.CWT
 Crown Willamette P. Co., Pfd.CWW Pr
 Curtiss-Wright Corp.CWZ
 Colorado & Southern Ry.CX
 Colorado & Southern Ry., Pfd.CX Pr

D

Davison Chemical Co.D
 DeBeers Consolidated MinesDB
 Du Pont de Nemours & Co. (E. I.)DD

Debenhams Securities, Ltd.DEM
 Deere & Co., Pfd.DER Pr
 Detroit & Mackinac Ry.DET
 Associated Dry Goods Corp.DG
 Canada Dry Ginger Ale, Inc.DGL
 Denver & Rio Grande West. R. R.DGR
 Delaware & Hudson Co.DH
 Dunhill International, Inc.DHI
 Durham Hosiery MillsDHO
 Durham Hos. Mills, 7% Pfd.DHO Pr
 Detroit, Hillsdale & S. W. Ry.DHS
 New York Dock Co.DK
 Delaware, Lack. & Western R. R.DL
 Cuban-Dominican Sugar Corp.DMS
 Diamond Match Co.DN
 Dome Mines LimitedDO
 Dominion Stores LimitedDOS
 Duplan Silk Corp.DPS
 Duquesne Light CompanyDQU
 Devoe & Reynolds, Inc.DRS
 Devoe & Reynolds, Inc., Pfd.DRS Pr
 Drug, Inc.DRU
 Duluth, South Shore & Atl. Ry.DS
 Detroit Edison Co.DTE
 Detroit United Ry.DU
 Duluth Superior Traction Co.DX

E

Erie R. R.E
 Electric Storage BatteryEG
 National Enameling & Stamping Co.EGK
 Emerson BrantinghamEGM
 Eitingon Schild Co., Inc.EGS
 Elk Horn Coal Corp.EH
 Elk Horn Coal Corp., Pfd.EH Pr
 Endicott JohnsonEJ
 Eastman Kodak Co. of N. J.EK
 Eastman Kodak Co. of N. J., Pfd.EK Pr
 Electric Power & Light Corp.EL
 El. Pwr. & Lt. Corp. (allot. ctf. full
 paid)EL
 El. Pwr. & Lt. Corp. (allot. ctf. 50 %
 paid)EL
 Electric Pwr. & Lt. Corp., Pfd.EL Pr
 Electric Boat Co.ELB
 Electric Auto-Lite Co (The)ELO
 Electric Auto-Lite Co. (The), Pfd.ELO Pr
 Emporium Capwell Corp. (The)EMP
 Eaton Axel & Spring Co.ENX
 Erie & Pittsburgh R. R. Co.EP
 Engineers Public Service Co.EPU
 Equitable Office Bldg. Corp.EQ
 Equitable Office Bldg. Corp., Pfd.EQ Pr
 Eastern Rolling Mill Co.ER
 Eureka Vacuum Cleaner Co.EU
 Evans Auto Loading Co. (The)EVY
 Exchange Buffet Corp.EXY

F

Fleischmann CompanyF
 Filene's (Wm.) Sons Co.FFL
 Filene's (Wm.) Sons Co., Pfd.FFL Pr
 Shattuck Co. (Frank G.)FHK
 Fashion Park Associates, Inc.FHP
 Fairbanks CompanyFI
 Fairbanks Company, Pfd.FI Pr

Franklin Simon Co., Pfd. **FIS Pr**
 American Steel Foundries **FJ**
 American Steel Foundries, Pfd. **FJ Pr**
 Fisk Rubber Co. **FK**
 Fisk Rubber Co., 1st Pfd. **FK Pr**
 Fisk Rubber Co., Conv. 1st Pfd. **FK Pr**
 Fisk Rubber Co., 2nd Pfd. **FK Pr**
 Fairbanks, Morse & Co. **FKM**
 Fairbanks, Morse & Co., Pfd. **FKM Pr**
 Fuller (Geo. A.) & Co. **FL**
 Florsheim Shoe Co. (The) **FLO**
 Federal Light & Traction **FLT**
 Federal Light & Traction, Pfd. **FLT Pr**
 Follansbee Brothers Co. **FLZ**
 Federal Motor Truck Co. **FMT**
 St. Louis-San Francisco **FN**
 Foundation Company (The) **FO**
 Fox Film Corporation **FOX**
 Paramount Famous Lasky Corp. **FP**
 Fidel.-Phen. Fire Ins. Co. of N. Y. **FPX**
 Federal Mining & Smelting **FS**
 First National Stores, Inc. **FST**
 Freeport Texas Co. **FT**
 Fifth Avenue Bus Sec. Corp. **FV**
 Pitts., Ft. Wayne & Chicago **FW**
 Foster Wheeler Corp. **FWC**
 Federal Water Service Corp. **FWS**

G

Consolidated Gas Co. **G**
 Gamewell Co. (The) **GAC**
 Granby Cons. Min., Smelt. & Pw. **GB**
 General Baking Co., Pfd. **GBG Pr**
 General Foods Corp. **GF**
 Goodrich Co. (B. F.) **GG**
 General Cable Corp. **GGN**
 Gobel (Adolph), Inc. **GGO**
 Gen. Gas & El. Corp. (of Del.), (Class
 A and B) **GGS**
 Gen. Gas. & El. Corp. (of Del.), Pfd. **GGS Pr**
 Grigsby-Grunow Co. **GGZ**
 Helme Co. (G. W.) **GH**
 Helme Co. (G. W.), Pfd. **GH Pr**
 Gotham Silk Hosiery Co., Inc. **GHM**
 Goth. S. Hos., Pfd. (without Warr.) **GHM Pr**
 Graham-Paige Motors Corp. **GHR**
 Gimbel Bros., Inc. **GIL**
 Gillette Safety Razor Co. **GIL**
 General Ice Cream Corp. **GIP**
 General Mills, Inc. **GIS**
 Gulf States Steel Co. **GJ**
 Gulf States Steel Co., Pfd. **GJ Pr**
 Gold Dust Corp. **GK**
 General Electric **GL**
 Glidden Company **GLN**
 Glidden Company, Prior Pfd. **GLN P.Pr**
 General Bronze Corp. **GLZ**
 General Motors **GM**
 General Motors, Debenture Stk. **GMD**
 Green Bay & Western Ry **GN**
 Greene Cananea Copper Co. **GNP**
 Grand (F. & W.) 5-10-25¢ Stores **GNW**
 Goodyear Tire & Rubber Co. **GOR**
 General Public Service Corp. **GPV**
 Great Northern Ry., Pfd. **CQ**
 Granite City Steel Co. **GRC**
 Gardner Motor Company, Inc. **GRD**

Gabriel Snubber Mfg. Co. (The) **GRR**
 General Railway Signal **GRS**
 General Railway Signal, Pfd. **GRS Pr**
 General Refractories Co. **GRX**
 Guantanamo Sugar Co. **GS**
 Guantanamo Sugar Co., Pfd. **GS Pr**
 Great Western Sugar Co. **GSW**
 Great Western Sugar Co., Pfd. **GSW Pr**
 Gold & Stock Telegraph Co. **GSX**
 General Amer. Tank Car Corp. **GT**
 Grant (W. T.) Co. **GTY**
 Gulf, Mobile & Northern **GU**
 Gould Coupler Co. (The) **GUC**
 Grand Union Co. (The) **GUX**
 General Outdoor Adver. Co., Inc. **GVZ**
 Chicago Great Western **GW**
 General Cigar Co. **GY**
 General Cigar Co., Pfd. **GY Pr**

H

Hupp Motor Car Corp. **H**
 N. Y. & Harlem **HAR**
 Houdaille-Hershey Corp. **HH**
 Hahn Department Stores, Inc. **HHN**
 American Hide & Leather Co. **HI**
 Hawaiian Pineapple Co., Ltd. **HIP**
 Mallinson (H. R.) & Co. **HK**
 Mallinson (H. R.) & Co., Pfd. **HK Pr**
 Harbison-Walker Refrac. Co. **HKM**
 Hollander & Son (A.), Inc. **HLL**
 Holland Furnace Co. **HLN**
 Homestake Mining **HM**
 Hudson Motor Car Co. **HMT**
 Hamilton Watch Co., 6% Pfd. **HMW Pr**
 U. S. Hoffman Mach. Corp. **HMY**
 Havana Electric Ry. Co. **HN**
 Havana Elec. Ry. Co., 6% Pfd. **HN Pr**
 Hanna Company, Pfd. **HNA Pr**
 Houston Oil Co. **HO**
 Household Finance Corp. **HOF**
 Hoe (R.) & Co. **HOO**
 Household Products, Inc. **HOU**
 Hercules Powder Co. **HPC**
 International Harvester Co. **HR**
 Hartman Corp. **HRT**
 Hershey Chocolate Corp. **HSY**
 Hocking Valley Ry. **HV**
 Howe Sound Co. **HW**
 Hackensack Water Co. **HWA**
 Hudson & Manhattan R. R. **HX**
 Hayes Body Corp. **HYB**

I

Iowa Central Ry. **IA**
 International Cement Corp. **ICM**
 Island Creek Coal Co. **ICR**
 Island Creek Coal Co., Pfd. **ICR Pr**
 International Agr. Corp. **IGL**
 Intl. Printing Ink Corp. (The) **IKN**
 Intl. Printing Ink Corp. (The), Pfd. **IKN Pr**
 Illinois Central R. R. **IL**
 Illinois Cent. R. R. Leased Lines **ILL**
 International Match Corp. **ILM**
 Inland Steel Company **ILN**
 Industrial Rayon Corp. **ILR**
 International Salt Co. **ILS**

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY SYMBOLS 801

Internatl. Business Mach. Corp.IMN
 Indian Motorcycle Co.IMY
 Indian Motorcycle Co., Pfd.IMY Pr
 International Comb. Eng. Corp.IN
 Investors Equity Co., Inc.INQ
 International Silver Co.INR
 International Silver Co., Pfd.INR Pr
 Inspiration Cons. Cop. Co.INS
 International Paper Co.IP
 International Paper & Power Co.
 (Class A)IP.A
 International Paper & Power Co.
 (Class B)IP.B
 International Paper & Power Co.
 (Class C)IP.C
 International Paper & Power Co.
 (Pfd.)IP.Pr.N
 Internat.-Hydro-Electric SystemIPH
 Independent Oil & Gas Co.IPX
 Ingersoll-Rand Co.IR
 Ingersoll-Rand Co., Pfd.IR Pr
 Inter. Rys. of Cen. Amer.IRC
 Inter. Rys. of Cen Amer., Pfd.IRC Pr
 Iron Products Corp.IRO
 Indian Refining Co.IRR
 Interboro Rapid Transit Co.IRT
 Intercontinental Rubber Co.IRU
 Intertype CorporationIRY
 American Ice Co.IS
 Interstate Dept. Stores, Inc.ISD
 Interstate Dept. Stores, Inc., Pfd.
 (x.w.)ISD Pr
 Interstate Dept. Stores, Inc., Pfd.
 (w.w.)ISD Pr
 International Shoe Co.ISS
 International Tel. & Tel. Co.ITT

J

Standard Oil Co. of N. J.J
 Central R. R. of New JerseyJC
 Jordan Motor Car Co.JJ
 Kayser & Co. (Julius)JKS
 Jones & Laughlin Steel, Pfd.JL Pr
 Joliet & Chicago R. R.JLO
 Johns-Manville Corp.JMP
 Johns-Manville Corp., Pfd.JMP Pr
 St. Joseph Lead Co.JO
 Jones Bros. Tea Co.JOT
 Alaska Juneau Gold Mining Co.JU
 Jewel Tea Co.JW

K

Chrysler CorporationK
 Kresge Department StoresKDS
 Kresge Department Stores, Pfd.KDS Pr
 Kresge Co. (The S. S.)KG
 Kresge Co. (The S. S.) Pfd.KG Pr
 Kelly-Springfield Tire Co.KK
 Kelly-Springfield Tire Co., 6% Pfd.KK Pr
 Kelly-Springfield Tire Co., 8% Pfd.KK Pr
 Kaufmann Dept. Stores, Inc.KKN
 Kraft-Phenix Cheese Corp.KKR
 Kendall Co. (The) Pfd.KLL Pr
 Keith-Albee-Orpheum Corp.KLO
 Kansas City Power & Light Co.KLT
 Kelvinator Corp.KLV

Kimberly-Clark Corp.KMB
 Kennecott Copper Corp.KN
 Kinney & Co. (G. R.)KNX
 Kinney & Co. (G. R.), Pfd.KNX Pr
 Coca-Cola Co.KO
 Coca-Cola International Corp.KOC
 Kolster Radio Corp.KOR
 Kroger Gro. & Baking Co. (The)KR
 Kreuger & Toll Co.KRT
 Kress & Co. (S. H.)KS
 Kansas City Southern Ry.KSU
 Missouri-Kansas-TexasKT
 Kelsey-Hayes Wheel Corp.KW

L

Lambert Company (The)LAM
 Link-Belt CompanyLB
 Libbey-Owens Glass Co.LBO
 Lehigh Valley Coal Corp.LEH
 Loft IncorporatedLF
 Laclede Gas Light Co. of St. LouisLG
 Laclede Gas Light Co. of St. L., Pfd. LG Pr
 Lago Oil & Transport Corp.LGO
 Louisiana Oil Refining Corp.LL
 Louisiana Oil Refg. Corp., Pfd.LL Pr
 Liggett & Myers TobaccoLM
 Liggett & Myers, "B" StockLMB
 Ludlum SteelLMS
 Lima Loco. WorksLMW
 Louisville & NashvilleLN
 Lehn & Fink Products Co.LNP
 Loose-Wiles Biscuit Co.LO
 Loose-Wiles Biscuit Co., Pfd.LO Pr
 Lorillard Co. (P.)LOR
 Lorillard Co. (P.), Pfd.LOR Pr
 Louisville Gas & Electric Co.LOU
 Lehigh Portland Cement Co.LPT
 Lehigh Portland Cement Co., Pfd.LPT Pr
 Long-Bell Lumber Corp.LQ
 Liquid Carbonic Corp. (The)LQT
 Lee Rubber & Tire Corp.LR
 National Lead Co.LT
 National Lead Co., Pfd. "A"LT Pr
 National Lead Co., Pfd. "B"LT Pr
 Lehigh Valley R. R.LV
 Loew's IncorporatedLW

M

Montgomery Ward & Co.M
 May Department Stores Co.MA
 Maracaibo Oil Exploration Co.MAB
 MacAndrews & Forbes Co.MAF
 MacAndrews & Forbes, Pfd.MAF Pr
 Mahoning Coal Railroad Co.MAH
 Manhattan RailwayMAN
 Manhattan Railway, Gtd. (Old)MAN
 Madison Square Garden Corp.MAQ
 Int. Mercantile Marine Co.MAR
 Mandel Brothers, Inc.MB
 Michigan Central R. R.MC
 McGraw-Hill Publishing Co., Inc.MCG
 Michigan Steel Corp.MCH
 McKesson & Robbins, Inc.MCK
 Morris & Essex R. R.ME
 Melville Shoe CorporationMES
 Metro-Goldwyn PicturesMGL

Mengel Company (The)**MGX**
 Mengel Company (The), Pfd.**MGX Pr**
 Minn.-Honeywell Regulator Co.**MHW**
 Mackay Companies**MK**
 McLellan Stores Co.**MLL**
 Marmon Motor Car Co.**MMC**
 Miami Copper Co.**MMP**
 Minneapolis-Moline Power Implement
 Co.**MMW**
 Magma Copper Co.**MMX**
 Mexican Petroleum Co., Ltd.**MN**
 Mexican Northern Ry.**MNO**
 Mullins Manufacturing Corp.**MNS**
 Mullins Mfg. Corp., Pfd.**MNS Pr**
 Manati Sugar Co.**MNU**
 Manati Sugar Co., Pfd.**MNU Pr**
 Mohawk Carpet Mills, Inc.**MOK**
 Morrell (John) & Co., Inc.**MOL**
 Moon Motor Car Co.**MOO**
 Missouri Pacific R. R.**MOP**
 Mother Lode Coalition Mines Co.**MOR**
 Morris & Co., Ltd., Inc. (Philip)**MOS**
 Midland Steel Products Co.**MPO**
 Motor Products Corp.**MPS**
 Motion Picture Capital Corp.**MPX**
 Mid-Continent Petroleum Corp.**MPZ**
 Mack Trucks, Inc.**MQ**
 Moto Meter Gauge & Equipment Corp. **MQU**
 Marlin Rockwell Corp.**MR**
 Miller Rubber Co. (The)**MRC**
 Market Street Railway**MRR**
 Martin-Parry Corp.**MRT**
 Motor Wheel Corporation**MRW**
 McCrory Stores Corp.**MRY**
 McCrory Stores Corp., Pfd.**MRY Pr**
 McCrory Stores Corp. "B"**MRY**
 Minneapolis & St. Louis R. R.**MS**
 Minn., St. Paul & S. S. M. Ry.**MSM**
 Minn., St. P. & S. S. M. L. Lines ..**MSM LL**
 Minn., St. P. & S. S. M. Ry., Pfd. ..**MSM Pr**
 Middle States Oil**MSO**
 Mexican Seaboard Oil**MSX**
 Manhattan Electric Supply So.**MSY**
 Manhattan Shirt So.**MT**
 Manhattan Shirt Co., Pfd.**MT Pr**
 McIntyre Porcupine Mines**MTY**
 Munsingwear, Inc.**MUN**
 Murray Corporation of America**MUY**
 McKeesport Tin Plate Co. (The)**MV**
 McCall Corporation**MW**
 National Rys. of Mexico**MX**
 Milwaukee El. Ry. & Li. Co., Pfd. ..**MY Pr**
 Maytag Co. (The)**MYG**
 Myers (F. E.) & Bro. Co. (The)**MYR**
 Macy (R. H.) & Co., Inc.**MZ**
 Mobile & Birmingham R. R., Pfd. **M&B Pr**

N

Intl. Nickel Co. of Can., Ltd.**N**
 North American Co.**NA**
 National Distillers Prod. Corp.**NAD**
 North American Edison Co.**NAE**
 National Air Transport, Inc.**NAS**
 National Bellas Hess Co., Inc.**NBH**
 National Acme Co.**NCM**
 National Cash Register Co. (The)**NCR**
 Newport Co. (The)**NEO**

Norfolk & Western Ry. Co.**NFK**
 Norfolk & W. Ry. Co., Adj. Pfd. ..**NFK Pr**
 North German Lloyd of Bremen**NGL**
 N. Y., Chicago & St. Louis**NKP**
 N. Y., Lackawanna & Western**NL**
 Nickel Holdings Corp.**NNK**
 Northern Central Ry.**NNX**
 Nunnally Co.**NNY**
 New Orleans, Texas & Mex. Ry.**NOX**
 Northern Pacific**NP**
 National Power & Light Co.**NPL**
 National Dairy Products Corp.**NPT**
 National Radiator Corp.**NRC**
 Norwalk Tire & Rub. Co.**NRT**
 Norwalk Tire & Rub. Co., Pfd.**NRT Pr**
 N. Y. Railways Corp., Pfd.**NRYP**
 Norfolk Southern R. R.**NS**
 National Supply Co.**NSC**
 National Supply Co., Pfd.**NSC Pr**
 N. Y. Steam Corporation, Pfd.**NSM Pr**
 Nash Motors Co.**NSS**
 N. Y. State Railways**NST**
 National Surety Co.**NSU**
 Newton Steel Co. (The)**NSX**
 National Tea Company**NTY**
 Nevada Consolidated Copper**NV**
 Chicago & Northwestern**NW**
 Northwestern Telegraph**NWT**
 National Dept. Stores, Inc.**NX**
 National Dept. Stores, Inc., Pfd.**NX Pr**
 Standard Oil Co. of N. Y.**NY**

O

Owens-Illinois Glass Co.**OB**
 Oliver Farm Equipment Co.**OF**
 Chicago, St. P., Minn. & Omaha**OM**
 Oppenheim, Collins & Co., Inc.**OPS**
 Orpheum Circuit**OPX**
 Great Northern Iron Ore Prop.**OR**
 Otis Steel Co.**OST**
 Otis Elevator Co.**OT**
 Otis Elevator Co., Pfd.**OT Pr**
 Outlet Company (The)**OTU**
 Outlet Co. (The), Pfd.**OTU Pr**
 Willys Overland**OV**
 N. Y., Ontario & Western**OW**
 Oil Well Supply Company**OWY**
 Oil Well Supply Co., Pfd.**OWY Pr**

P

Phillips Petroleum Co.**P**
 Pennsylvania R. R.**PA**
 Pacific Tel. & Tel. Co.**PAC**
 Patino Mines & Enterprises**PAE**
 Packard Motor Car Co.**PAK**
 United Paperboard**PB**
 Pittsburgh Coal Co. (of Penna.)**PC**
 Pacific Gas & Electric Co.**PCG**
 Panhandle Producing & Ref. Co.**PDF**
 Phelps Dodge Corp.**PDO**
 Peoria & Eastern Ry.**PE**
 Public Service Electric & Gas Co.**PEG**
 Pet Milk Co.**PET**
 Prairie Oil & Gas Co. (The)**PF**
 Penick & Ford, Ltd., Inc.**PFK**
 Penick & Ford, Ltd., Inc., Pfd.**PFK Pr**

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY SYMBOLS 803

Producers & Refiners Corp.PFN
Producers & Refiners Corp., Pfd.PFN Pr
Pacific MillsPFS
Pittsburgh Steel Co., Pfd.PG Pr
Proctor & Gamble Co. (The)PGM
Philadelphia Co.PH
Philadelphia Co., 5% Pfd.PH Pr
Philadelphia Co., 6% Pfd.PH Pr
Pittsburgh Screw & Bolt Corp.PIT
Phillips-Jones Corp.PJ
Phillips-Jones Corp., Pfd.PJ Pr
Park & TilfordPKT
Pacific Lighting Corp.PLT
Pittsburgh, McKeesport & YoughPMY
Peoples Gas Lt. & Coke Co.PO
Pierce Oil Corp.POL
Poor & CompanyPOR
Pan-American Pet. & Trans. Co.PP
Pan-Am. Pet. & Trans., Class B.PPB
Prairie Pipe Line Co. (The)PPI
Pittsburgh Term. Coal Corp.PPT
Pittsburgh Term. Coal Corp., Pfd.PPT Pr
Pan-Amer. Western Pet. Co.PPW
Pierce Petroleum Corp.PPX
Pere Marquette R. R.PQ
Pere Marquette Prior Pfd.PQR
Punta Alegre Sugar Co.PQS
Phila. & Reading Coal & Iron Corp.PRC
Pirelli Co. of ItalyPRL
Porto Rican-American Tob. Co.PRT
Pressed Steel Car Co.PSL
Peerless Motor Car Corp.PSS
Postal Telegraph & Cable Corp.PST
South Porto Rico SugarPSU
South Porto Rico Sugar, Pfd.PSU Pr
Pillsbury Flour Mills, Inc.PSY
Pitts., Cin., Chic. & St. L. R. R.PT
Pathe Exchange, Inc.PTH
Cleveland & Pittsburgh, Gtd.PTT
Cleve. & Pitts., Special Gtd.PTT SPL
Purity Bakeries Corp.PTY
Pullman, Inc.PU
Public Service Corp. of N. J.PUB
Park Utah Cons. Mines Co.PUC
Pure Oil Co.PUY
Pure Oil Co., Pfd.PUY Pr
Philadelphia Rapid TransitPV
Pennsylvania Coal & Coke Corp.PVX
Pittsburgh & West Va. Ry.PW
Pacific Coast Co.PX
Pacific Coast Co., 1st Pfd.PX Pr
Pacific Coast Co., 2nd Pfd.PX Pr
Penna.-Dixie Cement Corp.PXC
Phoenix Hosiery Co.PXY
Phoenix Hosiery Co., Pfd.PXY Pr
Pacific OilPY
Pitts., Youngstown & Ash., Pfd.PYA Pr
Pro-phy-lac-tic Brush Co.PYE
Pierce Arrow Motor Car Co.PZ

Q

Warner-Quinlan Co.QW

R

Radio Corporation of AmericaR
Raybestos-Manhattan, Inc.RAY
Republic Brass Corp.RB

Republic Iron & SteelRBC
Royal Baking Powder Co.RBP
Royal Dutch, N. Y. SharesRD
Reading Co.RDG
Ritter Dental Mfg. Co., Inc.RDL
Rand MinesRDM
Remington Typewriter Co., Pfd.REM Pr
Rio Grande Oil Co.RGO
Chicago, Rock Island & Pac. Ry.RI
Richfield Oil Co. of CaliforniaRIL
Reis & Co. (Robert)RIS
Reynolds (R. J.) Tobacco Co.RJR
Reynolds (R. J.) Tob. Co. ("B")RJR
Radio-Keith-Orpheum Corp.RKK
Rensselaer & Saratoga R. R.RNS
Rossia Insurance Co. of AmericaROS
Remington Rand, Inc.RR
Reynolds Spring Co.RSA
Real Silk Hosiery Mills, Inc.RSH
Real Silk Hosiery Mills, Inc., Pfd. RSH Pr
R. R. Securs. Co., Ill. Cent. StockRSY
U. S. Rubber Co.RU
Rutland R. R.RV
Rhine-Westphalia El. Pwr. Corp.RWE
Advance-Rumely Co.RX
Reo Motor Car Co.RY

S

Sears, Roebuck & Co.S
Savage Arms Corp.SA
Safeway Stores, Inc.SAF
Safeway Stores, Inc., 6% Pfd.SAF Pr
Safeway Stores, Inc., 7% Pfd.SAF Pr
Sixth Ave. R. R.SAV
Seaboard Air LineSB
Blumenthal & Co. (Sidney), Pfd.SBM Pr
Standard Brands IncorporatedSBX
Sinclair Consol. Oil Corp.SC
Standard Oil Co. of CaliforniaSCD
Southern California Edison Co.SCE
Spang, Chalfant & Co., Inc.SCH
Spang, Chalfant & Co., Inc., Pfd.SCH Pr
Southern Dairies, Inc.SD
Spalding (A. G.) & Bros.SDG
Spalding (A. G.) & Bros., Pfd.SDG Pr
Sharp & Dohme, Inc.SDH
Standard Com. Tobacco Co.SDT
Seneca Copper Mining Co.SEN
Standard Gas & Electric Co.SG
Standard Plate Glass Co.SGL
Standard Plate Glass Co., Pfd.SGL Pr
Shell Transp. & Trad. Co., Ltd.SH
Schulte Retail Stores Corp.SHO
Schulte Retail Stores Corp., Pfd.SHO Pr
Shubert Theatre CorporationSHU
Superior OilSI
Simmons CompanySIM
Spencer Kellogg & Sons, Inc.SK
Sparks-Withington Co. (The)SKW
Sterling Securities Corp.SLG
Sloss Sheffield Steel & IronSLS
Standard Milling Co.SM
Standard Milling Co., Pfd.SM Pr
Spiegel, May, Stern Co., Inc.SMS
Second Natl. Investors, Corp.SNI
Snider Packing Corp.SNR
American Snuff CompanySNU

American Snuff Company, Pfd.SNU Pr
 Solvay American Inv. Corp.SO
 Scott Paper Co.SPP
 Southern Ry. (Mobile & O. Cfts.)SRM
 St. Louis & Southwestern R. R.SS
 Sharon Steel Hoop Co.SSH
 Spear & CompanySST
 Superior SteelSSU
 Spicer Mfg. Corp.SSY
 Chi., Mil., St. Paul & Pac. R. R.ST
 Stanley Company of AmericaSTA
 Standard Investing Corp.STD
 Studebaker Corp.STU
 Studebaker Corp., Pfd.STU Pr
 Stewart-Warner Corp.STX
 Submarine Boat Corp.SUB
 Sun Oil CompanySUN
 Sun Oil Company, Pfd.SUN Pr
 Shell Union Oil Corp.SUX
 Simms Petroleum Co.SV
 Seagrave Corporation (The)SVE
 Servel, Inc.SVL
 Stone & Webster, Inc.SW
 Sweets Co. of America, Inc.SWA
 Southern PacificSX
 Skelly Oil Co.SYE
 Symington Company (The)SYZ
 Southern Railway Co.SZ

T

Texas & Pacific Ry.T
 Third Ave. Ry.TAV
 Tobacco Products Corp.TB
 Tobacco Prod. Corp. (Div. Cfts.)TBS
 Tennessee Copper & Chem. Corp.TCC
 Thatcher Manufacturing Co.TCH
 Transcontinental Oil Co.TCN
 Trico Products Corp.TCO
 Toledo Railways & Light Co.TD
 Timkin-Detroit Axle Co. (The)TDX
 Texas Pacific Coal & Oil Co.TES
 Fair (The)TF
 Fair (The), Pfd.TF Pr
 Texas Gulf Sulphur Co.TG
 Thompson (John R.) Co.THM
 Timken Roller Bearing Co.TKR
 Toledo, Peoria & Western R. R.TP
 Truax-Traer Coal Co.TTC
 Transue & Williams Stl. Frg. Corp.TU
 Truscon Steel Co.TUX
 Tide Water Oil Co.TV
 Tide Water Asso. Oil Co. (New)TV
 Twin City Rap. Tr. Co.TWC
 Twin City Rap. Tr. Co., Pfd.TWC Pr
 Texas Corp. (The)TX
 Texas Pacific Land Trust (New)TKL
 Texas Pacific Land Trust (Old)TXL
 Chicago Yellow CabTXY
 American Type FoundersTY
 American Type Founders, Pfd.TY Pr
 Telautograph CorporationTZ

U

United Corporation (The)U
 United Aircraft & Trans. Corp.UAF
 United States Tobacco Co.UB

United States Tobacco Co. Pfd.UB Pr
 United Biscuit Co. of AmericaUBC
 United Business Publishers, Inc.UBP
 United Cigar StoresUC
 United Carbon Co.UCB
 Union Oil of CaliforniaUCL
 U. S. Industrial Alcohol Co.UD
 United DyewoodUDY
 Utah CopperUE
 United Elec. Coal CompaniesUEL
 United FruitUF
 U. S. Freight Co.UFG
 U. S. & Foreign Securities Corp.UFO
 United Gas Imp. Co. (The)UGI
 Utilities Power & Light Corp.ULA
 U. S. Distributing CorporationUM
 Union Carbide & Carbon Corp.UNC
 Underwood Elliott Fisher Co.UNX
 Underwood Elliott Fisher, Pfd.UNX Pr
 Union Pacific R. R. Co.UP
 Union Pacific R. R. Co., Pfd.UP Pr
 U. S. Express Co.USX
 Union Tank CarUTX
 U. S. Smelting, Refining & Min.UV
 Universal Pictures Co., Inc., Pfd.UVP Pr
 Universal Leaf Tobacco Co., Inc.UVV
 Univer. Leaf Tobacco Co., Pfd.UVV Pr
 Universal Pipe & Radiator Co.UVX
 Univ. Pipe & Radiator Co., Pfd.UVX Pr
 United Piece Dye Works (The)UW
 U. S. Leather Co. (The)UX
 U. S. Realty & ImprovementUZ

V

N. Y., N. H. & Hartford R. R. Co.V
 Vanadium Corp. of Amer.VA
 Vadsco Sales Corp.VAD
 Virginia-Carolina ChemicalVC
 Virginia Electric & PowerVE
 Vick Chemical Co.VIK
 Virginia Iron, Coal & CokeVK
 Virginia Iron, Coal & Coke, Pfd.VK Pr
 Vicksburg, Shreve, & Ry. Co.VKS
 Van Raalte Co.VRT
 Van Raalte Co., Pfd.VRT Pr
 Vulcan Detinning Co.VX

W

Western Union Telegraph Co.W
 Wabash Ry.WA
 Wright Aeronautical Corp.WAC
 Walgreen CompanyWAG
 Walworth CompanyWAL
 Warren Brothers Co.WAR
 Warren Brothers Co., Pfd.WAR Pr
 Warner Bros. Pictures, Inc.WBP
 Webster Eisenlohr, Inc.WBS
 Wisconsin Central Ry.WC
 Westvaco Chlorine Products Co.WCO
 Ward Baking Corp. (Class A)WD
 Ward Baking Corp. (Class B)WD
 Ward Baking Corp., 7% Pfd.WD Pr
 White Eagle Oil Refining Co.WEO
 West Penn Electric Co.WEP
 Wells Fargo & Co.WF

APPENDIX D, STOCKS LISTED ON N. Y. S. E., BY SYMBOLS 805

Warren Foundry & Pipe Corp.WFP
 White Motor Co.WHI
 White Rock Mineral Springs Co.WHR
 Wilson & Co., Inc.WIL
 Westinghouse Air Bk. Co. (The)WKM
 Wheeling & Lake Erie Ry.WL
 Wilcox-Rich CorporationWLX
 Western Maryland Railway Co.WM
 Wesson Oil & Snowdrift Co., Inc.WNO
 West Penn. Power Co., Pfd.WPP Pr
 Worthington Pump & Mach. Corp.WPU
 Western Pacific R. R. Corp.WR
 White Sewing Machine Corp.WSW
 Wrigley, Jr. & Co. (Wm.)WWY
 Westinghouse Elec. & Mfg. Co.WX
 Westinghouse El. & Mfg. Co., Pfd.WX Pr
 Wilcox (H. F.) Oil & Gas Co.WXC
 Westark Radio Stores, Inc.WXX
 Waldorf System, Inc.WXY
 American Woolen Co. of Mass.WY

Western Dairy Products Co.WYY
 Weston Elec. Instrument Corp.WZ

X

U. S. SteelX
 U. S. Steel, Pfd.X Pr
 Crucible SteelXA

Y

Yale & Towne Mfg. Co. (The)YA
 Youngstown Sheet & Tube Co.YB
 Yellow Truck & Coach Mfg. Co.YC
 Young (L. A.) Spring & Wire Corp.YG

Z

Woolworth Co. (F. W.)Z
 American Zinc, Lead & Smelting Co.ZA
 Zenith Radio Corp.ZE

BONDS LISTED ON THE NEW YORK STOCK EXCHANGE

Arranged Alphabetically According to NAMES of the BONDS

List as of September 23, 1929

A

Alabama Gt. SouthernAGS
 Alaska Gold Mines Co.AK
 Allegheny ValleyAV
 American Cotton Oil Co.AO
 Amer. I. G. Chemical Corp.AIG
 Anglo-Chilean Cons. Nitr. Corp.AGO
 Argentine RepublicARG
 Atch., Top. & S. Fe Adj. 4s, Stpd.AJS
 Atchison Trans. Short LineASL
 Atlanta BirminghamABM
 Atlanta, Knoxville & CincinnatiAKN
 Atlantic Fruit CoAFU
 Australia (Commonwealth of)AUT
 Austrian Government Guaranteed Loan AUS

B

Balt. & Ohio, Pitts., L. E. & W. Va. ..BWV
 Balt. & Ohio SouthwesternBX
 Bavaria (Free State of)BAV
 Belgium, Kingdom ofBEL
 Bell Telephone Co. of Penna.BLP
 Bergen (City of)BGN
 Berlin (City of)BLN
 Big Sandy Ry. (Ches. & Ohio)BSY
 Bolivia, Republic ofBLV
 Bordeaux, City of (France)BDX
 Brazil, U. S. ofBZ
 Broadway & Seventh Ave.BWY
 Brooklyn, Queens Co. & SuburbanBN
 Brooklyn Rapid TransitBRT
 Brooklyn Union ElevatedBUV
 Buenos Aires (City of)BRN
 Buffalo & Susq. Iron Co.BSQ

C

Cairo Bridge (Illinois Central)CAB
 California Gas & ElectricCGS
 Camaguey Sugar CompanyCGU
 Canada, Dominion ofCDN
 Canadian Northern Ry.CNO
 Carolina CentralCAR
 Central Branch Union PacificCB
 Central District Telephone Co.CDT
 Central FoundryFX
 Central of GeorgiaGO
 Central PacificCEP
 Central R. R. & Banking Co. of Ga.CBG
 Chicago & ErieCHE
 Chicago & Western IndianaCW
 Chicago, Burlington & QuincyQ
 Chicago Gas Light & Coke CoCGL
 Chicago, Mil. & St. PaulCST
 Chicago RailwaysCHR
 Chicago Union StationCHU
 Chile (Republic of)RCH
 Chinese Govt.CHN
 Choctaw, Oklahoma & GulfCHO
 Cincinnati Gas & Elec. Co.CCG
 Cincinnati, Hamilton & DaytonCHD
 Cincinnati, Ind., St. Louis & ChicagoCIN
 Cincinnati, Lebanon & NorthernCLN
 Cleveland, Lorain & Wheeling Ry. Co.CLW
 Cleveland Short LineCLV
 Cleveland Union TerminalCDU
 Cologne (City of)COL
 Columbia, Republic ofCLM
 Columbus & Ninth Ave.CMB
 Commercial Cable Co.CML
 Compania Azucarera BaraguaBGU

Consolidation Coal Co. of MarylandCCM
 Consumers Gas of ChicagoCGC
 Consumers Power Co.CMS
 Copenhagen (City of)COP
 Cuba (Republic of)CU
 Cumberland Tel. & Tel.CMT
 Czechoslovak RepublicCZ

D

Danish Consol. Mun. LoanDMU
 Denmark, Kingdom ofDEN
 Denver & Rio GrandeDRG
 Des Moines & Ft. DodgeDES
 Detroit River Tunnel Co.DTU
 Dodge Brothers, Inc.DEE
 Dominican RepublicDOM
 Dominion Iron & Steel Co., Ltd.DMX
 Donner Steel CompanyDNR
 Duluth & Iron RangeDI
 Dutch East IndiesDEI

E

East Tenn., Va. & Ga.ET
 Eastern Cuba Sugar Corp.ESU
 Edison Illum. Co. of BrooklynEKY
 Electric Pw. Corp. of GermanyEPG
 Elgin, Joliet & EasternEJO
 Erie, General LienEGL

F

Federated Metals Corp.FMS
 Finland (Republic of)FIN
 Finnish Municipal LoanFNU
 Florida East Coast Ry.FLA
 Fort Worth & Denver CityFD
 Framerican Indust. Dev. Corp.FMN
 French Natl. Mail S. S. LinesFHS
 French RepublicFH

G

Galv., H. & San A., Mex. & Pac. Div. ..GX
 General Motors Acceptance Corp.GMA
 General Petroleum Corp.GP
 General Steel Castings Corp.GRL
 Georgia & AlabamaGLA
 Georgia, Carolina & NorthernGCN
 German External LoanGER
 German General ElectricAEG
 Good Hope Steel & IronGHO
 Grand Trunk Ry.GNT
 Great Con. Elec. Pw. Co., Ltd. (Japan) ..CJP
 Great Falls Power Co.GPW
 Great Northern Ry.GNR
 Greater Prague, City ofPGU
 Gulf & Ship Island R. R. Co.GFI

H

Haiti, Republic ofHIT
 Holland-America LineHLM
 Houston & Texas CentralHT
 Houston, East & West TexasHTX
 Humble Oil & Refining Co.HMX
 Hungarian Cons. Mun. LoanHMU
 Hungary (Kingdom of)HUY

I

Illinois Bell Telephone Co.ILT
 Ill. Central, Louisville Div.ILO
 Ill. Central, St. Louis Div.ILX
 (Ill. Central) Chi., St. L. & New Orleans
 Joint BondsIJ
 Illinois Steel Co.ISC
 Indiana, Illinois & IowaINA
 Indiana Natural Gas & Oil Co.IG
 Indiana Steel Co.INX
 Interborough Metropolitan Co.IB
 Internatl.-Gt. Northn. R. R. Co.IT

J

Jamestown, Franklin & ClearfieldJKM
 Japanese Govt.JP

K

Kanawha & MichiganKM
 Kan. City, Ft. Scott & Memph. Ry. Co.
 4% of (1936)KU
 Kansas City TerminalKNY
 Kentucky CentralKY
 Kings County El. Light & Pw.KIN
 Kings County ElevatedKV
 Kresge Foundation (The)KFO

L

Lackawanna Steel Co.LK
 Lake Erie & WesternEW
 Lake Shore (N. Y. Central)CLS
 Lake Shore & Mich. SouthernLS
 Lautaro Nitrate Co., Ltd.LRU
 Leipzig (City of)LPZ
 Lexington Ave. & Pavonia Fer.LX
 Liberty Loan U. S. Govt.L
 Long Island R. R.LI
 Lou, & Nash., N. Orleans & Mob. Div. LMO
 L. & N. South. Monon. Joint 4sLNS
 Lyons (City of) (France)LY

M

Manila Elec. R. R. & Lighting Corp. ..MNR
 Marion Steam Shovel Co.MNV
 Marseilles, City of (France)MSS
 McCormick (Edith Rockefeller) Trust ..ERR
 Metropolitan Edison Co.MTT
 Mexico, United States ofMEX
 Michigan Central (N. Y. Cent.)CMC
 Midvale Steel & Ordnance Co.MVX
 Milwaukee & NorthernMIL
 Mobile & OhioMOB
 Mohawk & MaloneMOH
 Montana CentralMON
 Montana Power Co.MNT
 Montevideo (Uruguay), City ofMOV
 Montreal TramwaysMTL
 Morris & Co.MRS

N

Nash., Florence & SheffieldNFS
 Nassau Electric Ry.NU
 National R. R. of MexicoMXO
 National Starch Co.NSH

APPENDIX D, BONDS LISTED ON N. Y. S. E., BY NAMES 807

National Tube Co.NTU
 Netherlands, (Kingdom of the)NNS
 New England Tel. & Tel. Co.NTT
 New Orleans Public Serv., Inc.NPS
 New South Wales (State of)NSW
 N. Y., Brooklyn & Manhattan Beach Ry.
 Co.BMB
 N. Y., (City of) Corporate Stock or
 BondsNYC
 N. Y. Connecting R. R.NNR
 N. Y. Edison Co.EF
 N. Y. Gas, El. Lt., Ht. & Pw. Co.HP
 N. Y., L. E. & W. Dock & Imp.NLW
 N. Y. State Canal Imp.NK
 N. Y. State HighwayNYS
 N. Y., Susq. & WesternSSW
 N. Y. Telephone Co.NT
 N. Y., Westchester & BostonWRC
 Niagara Falls Power Co.NF
 Niagara, Lockport & Ontario Power Co. NCK
 Norfolk & SouthernNSO
 Norfolk & W. New River Div.NRD
 Nor. & W. Pocahontas Coal Co.NPO
 North American Cement Corp.NCT
 Northern OhioNR
 Northern Ohio Trac. & LightNLO
 Northern R. R. of Cal.NOR
 Northern States Power Co.NPW
 Norway, Kingdom ofNWX

O

Ogdensburg & Lake ChamplainOD
 Ohio, Ind. & WesternOHW
 Ohio Public Service Co.OPV
 Ontario Power, Niagara FallsOPW
 Oregon R. R. & NavigationONV
 Oregon Short LineORS
 Oregon-Wash. R. R. & Nav. Co.ORW
 Oriental Development Co., Ltd.ORV
 Oslo, City of (formerly Christiania)CRS

P

Pacific R. R. of MissouriPMO
 Paramount Broadway Corp.PWY
 Paris-Lyons-Medit. R. R. Co.PRY
 Park-LexingtonPLX
 Penn., Ohio & Detroit R. R.PAO
 Phila., Balto. & Washn.PBW
 Phila. & Reading Coal & Iron Co.PRG
 Phil. Islands Land GrantPHI
 Pittsburgh, Shenango & L. E.PSH
 Poland (Republic of)PUZ
 Porto Alegre (City of)PTX

Q

Queensland (State of)QN

R

Reading Co., Jer. Cen. Coll. 4sRJ
 Remington Arms Co., Inc.RRS
 Rhein-Main-Danube Corp.RHM
 Rhinelbe UnionREL
 Rio de JaneiroRJN

Rio Grande do Sul (State of)RSU
 Rio Grande Western Ry. Co.RGW
 Rochester Gas & Elec. Corp.RGS
 Rock Island Ark. & La.RK
 Rotterdam (City of)ROT

S

St. Joseph & Grand Island Ry. Co.JG
 St. Lawrence & AdirondackSAK
 St. Louis & CairoMRZ
 St. L., Iron Mt. & SouthernIM
 St. L., Ir. Mt. & S. Riv. & Gulf D.IMR
 St. Louis, Peoria & N. WesternSTW
 St. Louis, Rocky Mt. & Pac.SLR
 St. Louis SouthernSSO
 St. Paul & DuluthSDU
 St. P. & Kan. City Short LineKCS
 St. Paul, Minn. & ManitobaMM
 St. Paul Union Depot Co.SLU
 San Antonio & Aransas PassSAP
 San Paulo (City of)CSX
 San Paulo (State of)SAO
 Sante Fe (Prov. of) (Argentine)PSF
 Savannah Fla. & WesternSVW
 Scioto Vy. & New EnglandSVY
 Seaboard-All Florida Ry.SBF
 Seine, Dept. of theSE
 Serbs, Croats & Slovenes, (Kingdom of
 the)SSV
 Sinclair Crude Oil Pur. Co.SUY
 Sinclair Pipe LineSIP
 Soissons (City of)SSS
 South & North AlabamaSNA
 Southern Bell Telephone Co.SBT
 Southwestern Bell Tel. Co.SWT
 Sugar Estates of the OrienteORT
 Sweden (Kingdom of)SWN
 Swiss ConfederationSWZ
 Syracuse Lighting Co.SYR

T

Tenn. Coal, Iron & R. R. Co.TI
 Tennessee Electric Power Co.TPW
 Terminal R. R. Assn. of St. L.TAS
 Texas & New OrleansTTX
 Tokyo (City of) (Japan)TYO
 Toledo & Ohio Central Ry.TOC
 Toledo, St. L. & Western Ry.TOU
 Tol. Walhonding Valley & O.TWY
 Trumbull Steel Co. (The)TUY

U

Ulster & DelawareUDL
 Union Elevated of ChicagoCUV
 United Drug Co. (of Del.)UDD
 Un. King. of Gt. B. & IrelandUK
 United N. J. R. R. & CanalNJ
 United Rys. Co. of St. LouisUSL
 United Steamship Co., Ltd., of Copen-
 hagenSCP
 United Steel Works Corp.USW
 Uruguay (Republic of)UGY
 Utah & NorthernUH
 Utah Power & Light Co.UPW

V

Vandalia R. R.	VN
Virginia & Southwestern	VW
Virginia Midland Ry.	VM
Virginia Ry. & Power Co.	VY
Virginian Ry.	VR

W

Warner Sugar Ref. Co.	WSU
Washington Central Ry.	WCN

West Shore R. R.	WS
Westchester Lighting Co.	WH
Western Electric Co., Inc.	WN
Western N. Y. & Penn.	WNY
Western Pacific R. R. Co.	WRS
Westphalia United Electric Pwr. Corp.	WEW
Wheeling Steel Corp.	WHX
Wickwire Spencer Steel Co.	WIK
Wilkesbarre & Eastern	WE
Winchester Repeat. Arms Co.	WIN
Wisc., Cen. Sup. & Duluth Div.	WCS

UNITED STATES GOVERNMENT BONDS LISTED ON
THE NEW YORK STOCK EXCHANGE

U. S. Government Securities	US	Panama Canal	PAN
U. S. Treasury	US	Philippine Islands	PHI

APPENDIX E

LIST OF 10-SHARE UNIT STOCKS ON THE NEW YORK STOCK EXCHANGE

Arranged Alphabetically According to SYMBOLS

List as of September 23, 1929

A

Amer. Brake Shoe & Fdy., Pfd.**ABK Pr**
American Bank Note Co., Pfd.**ABN Pr**
Byers (A. M.) Co., Pfd.**ABY Pr**
American Coal Co. of Alleghany**ACL**
Archer-Daniels-Midland Co., Pfd.**ADD Pr**
Associated Oil Co.**ADO**
Am. Rad. & Stan. San. Corp., Pfd.**ADT Pr**
Am.-La France & Foamite Corp., Pfd.**AFG Pr**
Am. & Foreign Pwr. Co., \$6 Pfd. .. **AFW Pr**
Amer. Mach. & Foundry, Pfd.**AFX Pr**
Amer. Natural Gas Corp., Pfd.**AGN Pr**
Mathieson Alkali Works, Pfd.**AKL Pr**
Alabama & Vicksburg Ry. Co.**ALM**
American Piano Co., Pfd.**AMP Pr**
Ann Arbor R. R. Co.**AN**
Alliance Realty Co.**ANR**
Atlas Powder Company, Pfd.**APW Pr**
Albany & Susquehanna R. R.**AQS**
Artloom Corporation, Pfd.**ARR Pr**
Abraham & Straus, Inc., Pfd.**AST Pr**
American Shipbuilding Co.**ASU**
Allegheny & Western Ry. (Gtd).**AY**

B

Baldwin Loco. Works (The), Pfd.**B Pr**
Burns Bros., Pfd.**BB Pr**
Bloomingdale Bros., Inc., Pfd.**BBL Pr**
Beech Creek R. R. Co.**BCH**
Bucyrus-Erie Co., Pfd.**BEY Pr**
Buffalo & Susq. R. R. Corp., Pfd.**BFQ Pr**
Bamberger (L.) & Co., Pfd.**BG Pr**
Bush Terminal Bldgs. Co., Pfd.**BHB Pr**
Bush Term. Co. Deb. Stock**BHD**
Barker Bros. Corp.**BKR**
Kuppenheimer (B.) & Co.**BKU**
Barnet Leather Co., Pfd.**BLR Pr**
Bangor & Aroostook R. R., Pfd.**BNK Pr**
Am. Brown Boveri Elec. Corp., Pfd.**BOV Pr**
Buffalo, Roch. & Pitts. Ry.**BR**
Brown Shoe Co., 7% Pfd.**BW Pr**
Bayuk Cigars, Pfd.**BY Pr**

C

Cuba Railroad Co., Pfd.**CBR Pr**
Cleve., Cin., Chic. & St. L. Pfd.**CC Pr**
Carolina, Clinchfield & Ohio Ry.**CCL**

Central Alloy Steel Corp., Pfd.**CES Pr**
Colorado Fuel & Iron Co., Pfd.**CF Pr**
Corn Products Refining Co., Pfd.**CFG Pr**
City Ice & Fuel Co., Pfd.**CFY Pr**
Cons. Cigar Corp., 6½% Pfd. (w.w.) **CGR Pr**
Cons. Cigar Corp., 6½% Pfd. (x.w.) **CGR Pr**
Cons. Cigar Corp., 7% Pfd.**CGR Pr**
Continental Can Co., Inc., Pfd.**CH Pr**
Nashville, Chattanooga & St. L.**CHA**
Cushman's Sons, Inc., 7% Pfd.**CHS Pr**
Cushman's Sons, Inc., \$8 Pfd.**CHS Pr**
Christie, Brown & Co., Ltd.**CHT**
Chic., Ind. & Louisville Ry., Pfd.**CIL Pr**
Comm. Inv. Tr. Corp., 7% Pfd.**CIT Pr**
Central Coal & Coke Co.**CKO**
Cluett, Peabody & Co., Pfd.**CLU Pr**
Com. Credit Co., 6½% Pfd.**CMO Pr**
Com. Credit Co., 7% 1st Pfd.**CMO Pr**
Com. Credit Co., 8% Pfd. B**CMO Pr**
City Investing Co.**CNV**
California Petroleum Corp.**CPU**
Connecticut Ry. & Lighting Co.**CRW**
Canada Southern Ry.**CSA**
Cin., Sandusky & Cleve., Pfd.**CSC Pr**
City Stores Co., Class "A"**CSS**
Cuban-American Co., Pfd.**CSU Pr**
Century Ribbon Mills, Inc., Pfd.**CTY Pr**
Crown Willamette P. Co., Pfd.**CWW Pr**
Colorado & Southern Ry., Pfd.**CX Pr**

D

DeBeers Consolidated Mines**DB**
Deere & Co., Pfd.**DER Pr**
Detroit & Mackinac Ry.**DET**
Durham Hos. Mills, 7% Pfd.**DHO Pr**
Detroit, Hillsdale & S. W. Ry.**DHS**
Diamond Match Co.**DN**
Devoe & Raynolds, Inc., Pfd.**DRS Pr**
Detroit United Ry.**DU**
Duluth Superior Traction Co.**DX**

E

Elk Horn Coal Corp., Pfd.**EH Pr**
Eastman Kodak Co. of N. J., Pfd.**EK Pr**
El. Pwr. & Lt. Corp., (allot. ctf. full
paid)**EL**
El. Pwr. & Lt. Corp. (allot. ctf. 50%
paid)**EL**
Electric Auto-Lite Co. (The), Pfd.**ELO Pr**

Emporium Capwell Corp. (The)EMP
 Erie & Pittsburgh R. R. Co.EP
 Equitable Office Bldg. Corp., Pfd.EQ Pr
 Exchange Buffet Corp.EXY

F

Filene's (Wm.) Sons Co., Pfd.FFL Pr
 Fairbanks Company, Pfd.FI Pr
 Franklin Simon Co., Pfd.FIS Pr
 American Steel Foundries, Pfd.FJ Pr
 Fisk Rubber Co., 1st Pfd.FK Pr
 Fisk Rubber Co., Conv. 1st Pfd.FK Pr
 Fisk Rubber Co., 2nd Pfd.FK Pr
 Fairbanks, Morse & Co., Pfd.FKM Pr
 Federal Light & Traction, Pfd.FLT Pr
 Fifth Avenue Bus Sec. Corp.FV
 Pitts., Ft. Wayne & ChicagoFW

G

General Baking Co., Pfd.GBG Pr
 Gen. Gas & El. Corp. (of Del.) Pfd.GGS Pr
 Helme Co. (G. W.), Pfd.GH Pr
 Goth. S. Hos., Pfd. (without Warr.) GHM Pr
 General Ice Cream Corp.GIP
 Gulf States Steel Co., Pfd.GJ Pr
 Glidden Company, Prior Pfd.GLN P.Pr
 Green Bay & Western Ry.GN
 General Railway Signal, Pfd.GRS Pr
 Guantanamo Sugar Co., Pfd.GS Pr
 Great Western Sugar Co., Pfd.GSW Pr
 Gold & Stock Telegraph Co.GSX
 General Cigar Co., Pfd.GY Pr

H

N. Y. & HarlemHAR
 Mallinson (H. R.) & Co., Pfd.HK Pr
 Harbison-Walker Refrac. Co.HKM
 Hamilton Watch Co., 6% Pfd.HMW Pr
 Havana Elec. Ry. Co., 6% Pfd.HNP Pr
 Hanna Company, Pfd.HNA Pr
 Hocking Valley Ry.HV
 Hackensack Water Co.HWA

I

Iowa Central Ry.IA
 Island Creek Coal Co., Pfd.ICR Pr
 Intl. Printing Ink Corp. (The), Pfd.IKN Pr
 Illinois Central R. R., Leased LinesIL.LL
 International Salt Co.ILS
 Indian Motorcycle Co., Pfd.IMY Pr
 International Silver Co., Pfd.INR Pr
 Ingersoll-Rand Co., Pfd.IR Pr
 Inter. Rys. of Cen. Amer., Pfd.IRC Pr
 Iron Products Corp.IRO
 Interstate Dept. Stores, Inc., Pfd.
 (x.w.)ISD Pr
 Interstate Dept. Stores, Inc., Pfd.
 (w.w.)ISD Pr

J

Jones & Laughlin Steel, Pfd.JL Pr
 Joliet & Chicago R. R.JLO
 Johns-Manville Corp., Pfd.JMP Pr
 Jones Bros. Tea Co.JOT

K

Kresge Department Stores, Pfd.KDS Pr
 Kresge (The S. S.) Co., Pfd.KG Pr
 Kelly-Springfield Tire Co., 6% Pfd.KK Pr
 Kelly-Springfield Tire Co., 8% Pfd.KK Pr
 Kendall Co. (The), Pfd.KLL Pr
 Kansas City Power & Light Co.KLT
 Kinney (G. R.) & Co., Pfd.KNX Pr
 Coca-Cola International Corp.KOC

L

Laclede Gas Light Co. of St. L., Pfd. LG Pr
 Louisiana Oil Refg. Corp., Pfd.LL Pr
 Loose-Wiles Biscuit Co., Pfd.LO Pr
 Lehigh Portland Cement Co., Pfd.LPT Pr
 National Lead Co., Pfd. "A"LT Pr
 National Lead Co., Pfd. "B"LT Pr

M

MacAndrews & Forbes, Pfd.MAF Pr
 Mahoning Coal Railroad Co.MAH
 Manhattan Railway, Gtd. (Old)MAN
 Michigan Central R. R.MC
 Morris & Essex R. R.ME
 Mengel Company (The), Pfd.MGX Pr
 Mexican Petroleum Co., Ltd.MN
 Mexican Northern Ry.MNO
 Mullins Mfg. Corp., Pfd.MNS Pr
 Manati Sugar Co.MNU
 McCrory Stores Corp.MRY
 Minn., St. P. & S. S. M., L. LinesMSM LL
 Manhattan Shirt Co., Pfd.MT Pr
 Milwaukee El. Ry. & Li. Co., Pfd.MY Pr
 Mobile & Birmingham R. R., Pfd. M&B Pr

N

Norfolk & W. Ry. Co., Adj. Pfd.NFK Pr
 N. Y., Lackawanna & WesternNL
 Nickel Holdings Corp.NNK
 Northern Central Ry.NNX
 New Orleans, Texas & Mex. Ry.NOX
 Norwalk Tire & Rub. Co., Pfd.NRT Pr
 National Supply Co., Pfd.NSC Pr
 N. Y. Steam Corporation, Pfd.NSM Pr
 N. Y. State RailwaysNST
 Northwestern TelegraphNWT
 National Dept. Stores, Inc., Pfd.NX Pr

O

Chicago, St. P., Minn. & OmahaOM
 Orpheum CircuitOPX
 Otis Elevator Co., Pfd.OT Pr
 Outlet Co. (The)OTU
 Outlet Co. (The), Pfd.OTU Pr
 Oil Well Supply Co., Pfd.OWY Pr

P

Pacific Tel. & Tel. Co.PAC
 Penick & Ford, Ltd., Inc., Pfd.PFK Pr
 Producers & Refiners Corp., Pfd.PFN Pr
 Pacific MillsPFS
 Pittsburgh Steel Co., Pfd.PG Pr

Philadelphia Co., 5% Pfd.**PH Pr**
 Phillips-Jones Corp., Pfd.**PJ Pr**
 Pittsburgh, McKeesport & Yough**PMY**
 Pittsburgh Term. Coal Corp., Pfd.**PPT Pr**
 Pan-Amer. Western Pet. Co.**PPW**
 Pere Marquette Prior Pfd.**PQR**
 South Porto Rico Sugar, Pfd.**PSU Pr**
 Pitts., Cin., Chic. & St. L. R. R.**PT**
 Cleveland & Pittsburgh, Gtd.**PTT**
 Cleve. & Pitts., Special Gtd.**PTT SPL**
 Pure Oil Co., Pfd.**PUY Pr**
 Philadelphia Rapid Transit**PV**
 Pacific Coast Co., 1st Pfd.**PX Pr**
 Pacific Coast Co., 2nd Pfd.**PX Pr**
 Phoenix Hosiery Co., Pfd.**PXY Pr**
 Pitts., Youngstown & Ash., Pfd.**PYA Pr**
 Pro-phy-lac-tic Brush Co.**PYY**

R

Rand Mines**RDM**
 Remington Typewriter Co., Pfd.**REM Pr**
 Reynolds (R. J.) Tobacco Co.**RJR**
 Rensselaer & Saratoga R. R.**RNS**
 Real Silk Hosiery Mills, Inc., Pfd. **RSH Pr**

S

Safeway Stores, Inc., 6% Pfd.**SAF Pr**
 Safeway Stores, Inc., 7% Pfd.**SAF Pr**
 Sixth Ave. R. R.**SAV**
 Blumenthal (Sidney) & Co., Pfd.**SBM Pr**
 Spang, Chalfant & Co., Inc., Pfd.**SCH Pr**
 Spalding (A. G.) & Bros., Pfd.**SDG Pr**
 Standard Plate Glass Co., Pfd.**SGL Pr**
 Schulte Retail Stores Corp., Pfd.**SHO Pr**
 Standard Milling Co., Pfd.**SM Pr**
 American Snuff Company, Pfd.**SNU Pr**
 Spear & Company**SST**

Stanley Company of America**STA**
 Studebaker Corp., Pfd.**STU Pr**
 Sun Oil Company, Pfd.**SUN Pr**

T

Toledo Railways & Light Co.**TD**
 Fair (The), Pfd.**TF Pr**
 Toledo, Peoria & Western R. R.**TP**
 Twin City Rap. Tr. Co., Pfd.**TWC Pr**
 Chicago Yellow Cab**TXY**
 American Type Founders, Pfd.**TY Pr**

U

United States Tobacco Co., Pfd.**UB Pr**
 United Dyewood**UDY**
 Utah Copper**UE**
 Underwood Elliott Fisher, Pfd.**UNX Pr**
 Universal Pictures Co., Inc., Pfd. **UVP Pr**
 Univer. Leaf Tobacco Co., Pfd.**UVV Pr**
 Univ. Pipe & Radiator Co., Pfd.**UVX Pr**

V

Virginia Electric & Power**VE**
 Virginia Iron, Coal & Coke**VK**
 Virginia Iron, Coal & Coke, Pfd.**VK Pr**
 Vicksburg, Shreve., & Pac. Ry. Co.**VKS**
 Van Raalte Co., Pfd.**VRT Pr**
 Vulcan Detinning Co.**VX**

W

Warren Brothers Co., Pfd.**WAR Pr**
 Wisconsin Central Rv.**WC**
 Ward Baking Corp. (Class A)**WD**
 West Penn Electric Co.**WEP**
 West Penn Power Co., Pfd.**WPP Pr**
 Westinghouse El. & Mfg. Co., Pfd. ..**WX Pr**

BANK STOCKS

Dealt in on a 10-share unit basis at Post 30

Corn Exchange Bank Trust Co.
 Equitable Trust Co.
 Fifth Avenue Bank

First National Bank
 New York & Trust Co. (Bank of)
 United States Trust Co.

APPENDIX F

TABLE FOR QUICK CALCULATION OF APPROXIMATE
ANNUAL YIELDS

Prices 20 to 500. Dividend Basis 2% to 10%.

Price	2%	3%	4%	5%	6%	7%	8%	Price	4%	5%	6%	7%	8%	9%	10%
20	10.0	15.0	20.0	25.0	30.0	35.0	40.0	80	5.0	6.3	7.5	8.8	10.0	11.3	12.5
21	9.5	14.3	19.1	23.8	28.6	33.3	38.1	81	4.9	6.2	7.4	8.6	9.9	11.1	12.3
22	9.1	13.6	18.2	22.7	27.3	31.8	36.4	82	4.9	6.1	7.3	8.5	9.8	11.0	12.3
23	8.7	13.0	17.4	21.7	26.1	30.4	34.8	83	4.8	6.0	7.2	8.4	9.6	10.8	12.1
24	8.3	12.5	16.7	20.8	25.0	29.2	33.3	84	4.8	6.0	7.1	8.3	9.5	10.7	11.9
25	8.0	12.0	16.0	20.0	24.0	28.0	32.0	85	4.7	5.9	7.1	8.2	9.4	10.6	11.8
26	7.7	11.5	15.4	19.2	23.1	26.9	30.8	86	4.7	5.8	7.0	8.1	9.3	10.5	11.6
27	7.4	11.1	14.8	18.5	22.2	25.9	29.6	87	4.6	5.8	6.9	8.1	9.2	10.3	11.5
28	7.1	10.7	14.3	17.9	21.4	25.0	28.6	88	4.6	5.7	6.8	8.0	9.1	10.2	11.4
29	6.9	10.3	13.8	17.2	20.7	24.1	27.6	89	4.5	5.6	6.7	7.9	9.0	10.1	11.2
30	6.7	10.0	13.3	16.7	20.0	23.3	26.7	90	4.4	5.6	6.7	7.8	8.9	10.0	11.1
31	6.5	9.7	12.9	16.1	19.4	22.6	25.8	91	4.4	5.5	6.6	7.7	8.8	9.9	11.0
32	6.3	9.4	12.5	15.6	18.8	21.9	25.0	92	4.4	5.4	6.5	7.6	8.7	9.8	10.9
33	6.1	9.1	12.1	15.2	18.2	21.2	24.2	93	4.3	5.3	6.4	7.5	8.6	9.7	10.8
34	5.9	8.8	11.8	14.7	17.7	20.6	23.5	94	4.3	5.3	6.4	7.5	8.5	9.6	10.6
35	5.7	8.6	11.4	14.3	17.1	20.0	22.9	95	4.2	5.3	6.3	7.4	8.4	9.5	10.5
36	5.6	8.3	11.1	13.9	16.7	19.4	22.2	96	4.2	5.2	6.3	7.3	8.3	9.4	10.4
37	5.4	8.1	10.8	13.5	16.2	18.9	21.6	97	4.1	5.2	6.2	7.2	8.3	9.3	10.3
38	5.3	7.9	10.5	13.2	15.8	18.4	21.1	98	4.1	5.1	6.1	7.1	8.2	9.2	10.2
39	5.1	7.7	10.3	12.8	15.4	18.0	20.5	99	4.0	5.1	6.1	7.1	8.1	9.1	10.1
40	5.0	7.5	10.0	12.5	15.0	17.5	20.0	100	4.0	5.0	6.0	7.0	8.0	9.0	10.0
41	4.9	7.3	9.8	12.2	14.6	17.1	19.5	101	4.0	5.0	5.9	6.9	7.9	8.9	9.9
42	4.8	7.1	9.5	11.9	14.3	16.7	19.1	102	3.9	4.9	5.9	6.9	7.9	8.9	9.8
43	4.7	7.0	9.3	11.6	14.0	16.3	18.6	103	3.9	4.9	5.8	6.8	7.8	8.8	9.7
44	4.6	6.8	9.1	11.4	13.6	15.9	18.2	104	3.9	4.8	5.8	6.7	7.7	8.7	9.6
45	4.4	6.7	8.9	11.1	13.3	15.6	17.8	105	3.8	4.8	5.7	6.7	7.6	8.6	9.5
46	4.4	6.5	8.7	10.9	13.0	15.2	17.4	106	3.8	4.7	5.7	6.6	7.6	8.5	9.4
47	4.3	6.4	8.5	10.6	12.8	14.9	17.0	107	3.7	4.7	5.6	6.5	7.5	8.4	9.3
48	4.2	6.3	8.3	10.4	12.5	14.6	16.7	108	3.7	4.6	5.6	6.5	7.4	8.3	9.3
49	4.1	6.1	8.2	10.2	12.2	14.3	16.3	109	3.7	4.6	5.5	6.4	7.3	8.3	9.2
50	4.0	6.0	8.0	10.0	12.0	14.0	16.0	110	3.6	4.6	5.5	6.4	7.3	8.2	9.1
51	3.9	5.9	7.8	9.8	11.8	13.7	15.7	111	3.6	4.5	5.4	6.3	7.2	8.1	9.0
52	3.9	5.8	7.7	9.6	11.5	13.5	15.4	112	3.6	4.5	5.4	6.3	7.2	8.1	9.0
53	3.8	5.7	7.6	9.4	11.3	13.2	15.1	113	3.5	4.4	5.3	6.2	7.1	8.0	8.9
54	3.7	5.6	7.4	9.3	11.1	13.0	14.8	114	3.5	4.4	5.3	6.1	7.0	7.9	8.8
55	3.6	5.5	7.3	9.1	10.9	12.7	14.6	115	3.5	4.4	5.2	6.1	7.0	7.8	8.7
56	3.6	5.4	7.1	8.9	10.7	12.5	14.3	120	3.3	4.2	5.0	5.8	6.7	7.5	8.3
57	3.5	5.3	7.0	8.8	10.5	12.3	14.0	125	3.2	4.0	4.8	5.6	6.4	7.2	8.0
58	3.5	5.2	6.9	8.6	10.3	12.1	13.8	130	3.1	3.9	4.6	5.4	6.2	6.9	7.7
59	3.4	5.1	6.8	8.5	10.2	11.9	13.6	135	3.0	3.7	4.4	5.2	5.9	6.7	7.4
60	3.3	5.0	6.7	8.3	10.0	11.7	13.3	140	2.9	3.6	4.3	5.0	5.7	6.4	7.1
61	3.3	4.9	6.6	8.2	9.8	11.5	13.1	145	2.8	3.5	4.1	4.8	5.5	6.2	6.9
62	3.2	4.8	6.5	8.1	9.7	11.3	12.9	150	2.7	3.3	4.0	4.7	5.3	6.0	6.7
63	3.2	4.8	6.4	7.9	9.5	11.1	12.7	155	2.6	3.2	3.9	4.5	5.2	5.8	6.5
64	3.1	4.7	6.3	7.8	9.4	10.9	12.5	160	2.5	3.1	3.8	4.4	5.0	5.6	6.3
65	3.1	4.6	6.2	7.7	9.2	10.8	12.3	165	2.4	3.0	3.6	4.2	4.8	5.5	6.1
66	3.0	4.6	6.1	7.6	9.1	10.6	12.1	170	2.4	2.9	3.5	4.1	4.7	5.3	5.9
67	3.0	4.5	6.0	7.5	9.0	10.5	11.9	175	2.3	2.9	3.4	4.0	4.6	5.1	5.7
68	2.9	4.4	5.9	7.4	8.8	10.3	11.8	180	2.2	2.8	3.3	3.9	4.4	5.0	5.6
69	2.9	4.4	5.8	7.3	8.7	10.1	11.6	190	2.1	2.6	3.2	3.7	4.2	4.7	5.3
70	2.9	4.3	5.7	7.1	8.6	10.0	11.4	200	2.0	2.5	3.0	3.5	4.0	4.5	5.0
71	2.8	4.2	5.6	7.0	8.5	9.9	11.3	210	1.9	2.4	2.9	3.3	3.8	4.3	4.8
72	2.8	4.2	5.6	6.9	8.3	9.7	11.1	225	1.8	2.2	2.7	3.1	3.6	4.0	4.4
73	2.7	4.1	5.5	6.9	8.2	9.6	11.0	250	1.6	2.0	2.4	2.8	3.2	3.6	4.0
74	2.7	4.1	5.4	6.8	8.1	9.5	10.8	275	1.5	1.8	2.2	2.5	2.9	3.3	3.6
75	2.7	4.0	5.3	6.7	8.0	9.3	10.7	300	1.3	1.7	2.0	2.3	2.7	3.0	3.3
76	2.6	3.9	5.3	6.6	7.9	9.2	10.5	350	1.1	1.4	1.7	2.0	2.3	2.6	2.9
77	2.6	3.9	5.2	6.5	7.8	9.1	10.4	400	1.0	1.3	1.5	1.8	2.0	2.3	2.5
78	2.6	3.8	5.1	6.4	7.7	9.0	10.3	450	0.9	1.1	1.3	1.6	1.8	2.0	2.2
79	2.5	3.8	5.1	6.3	7.6	8.9	10.1	500	0.8	1.0	1.2	1.4	1.6	1.8	2.0
	2%	3%	4%	5%	6%	7%	8%		4%	5%	6%	7%	8%	9%	10%

APPENDIX G

STOCKS INCLUDED IN REPRESENTATIVE MARKET AVERAGES

DOW-JONES 20 RAILROADS

(As of February 1, 1930)

Atchison, Topeka & Santa Fe	New York Central
Atlantic Coast Line	New York, Chic. & St. Louis
Baltimore & Ohio	New Haven
Canadian Pacific	Norfolk & Western
Chesapeake & Ohio	Northern Pacific
Chicago, R. I. & Pacific	Pennsylvania
Delaware & Hudson	Pere Marquette
Del., Lackawanna & Western	Southern Pacific
Erie	Southern Railway
Missouri Pacific	Union Pacific

DOW-JONES 30 INDUSTRIALS

(As of February 1, 1930)

Allied Chemical & Dye	International Nickel
American Can	Johns Manville
American Chemical	Mack Trucks
American Sugar	Nash Motors
American Tobacco, "B"	National Cash Register
Atlantic Refining	Paramount Famous Lasky
Bethlehem Steel	Radio
Chrysler	Sears, Roebuck
Curtiss Wright	Standard Oil of New Jersey
General Electric	Texas Corporation
General Foods	Texas Gulf Sulphur
General Motors	Union Carbide & Carbon
General Railway Signal	United States Steel
Goodrich	Westinghouse Electric
International Harvester	Woolworth

NEW YORK TIMES 25 RAILROADS

(As of January 1, 1930)

Atchison	Chicago & N. Western
Baltimore & Ohio	Delaware, Lackawanna & Western
Chesapeake & Ohio	Erie
Chic., Rock Island & Pacific	Great Northern, Pfd.

Illinois Central	Pennsylvania
Lehigh Valley	Pitts. & W. Va.
Louisville & Nashville	Reading
Missouri, Kansas & Texas	St. Louis-San Francisco
Missouri Pacific	Southern Pacific
New York Central	Southern Railway
New York, New Haven & Hartford	Texas & Pacific
Norfolk and Western	Union Pacific
Northern Pacific	

NEW YORK TIMES 25 INDUSTRIALS

(As of January 1, 1930)

	<i>Weight</i>		<i>Weight</i>
Air Reduction	3	Internat. Bus. Mach.	1
Allied Chem. & Dye	1	Internat'l Harvester	4
American Can	6	Internat'l Tel. & Tel.	3
Am. Smelt. & Ref.	3	Macy (R. H.) & Co.	1
Am. Tel. & Tel.	1	National Biscuit	1
American Tobacco	1	National Tea	4
Atlantic Refining	4	Texas Gulf Sulphur	4
Burroughs	5	Union Carb. & Carbon	3
Case Threshing	1	United Fruit	2½
Du Pont de Nemours	7	United States Steel	1
Eastman Kodak	1	Westinghouse Air Brake	4
General Electric	4	Woolworth	2½
General Motors	5		

STANDARD STATISTICS 50 INDUSTRIALS

(As of 1929)

International Harvester	Standard Brands
General Motors	United Fruit
Chrysler	St. Joseph Lead
Briggs Manufacturing	Endicott-Johnson
Stewart Warner	Allis Chalmers
Timken Roller Bearing	Armour of Ill. " A "
Goodyear Tire & Rubber	American Smelting
United States Rubber	International Nickel
American Radiator	American Can
Allied Chemical	Eastman Kodak
Union Carbide & Carbon	Pullman
Anaconda Copper	Burroughs Adding Machine
Kennecott Copper	National Cash Register, " A "
General Electric	Standard Oil of Cal.
General Foods	Standard Oil of New Jersey
National Biscuit	Texas Corporation

Abitibi Power & Paper, Ltd.	Bethlehem Steel
International Paper	United States Steel
Radio Corporation	American Sugar Refining
American Locomotive	Cuban American Sugar
Westinghouse Air Brake	Fox Film, "A"
Sears, Roebuck	Paramount Famous Lasky
Kresge, S. S.	American Tobacco, "B"
Woolworth	Reynolds Tobacco, "B"
Internatl. Merc. Marine, Pfd.	American Woolen

STANDARD STATISTICS 20 RAILROADS

(As of 1929)

Atchison, Topeka & S. Fe	Louisville & Nashville
Atlantic Coast Line	New York Central
Baltimore & Ohio	New York, Chicago & St. L.
Canadian Pacific	Norfolk & Western
Chesapeake & Ohio	Northern Pacific
Chicago & North Western	Pennsylvania
Delaware, Lackawanna & West.	Reading
Great Northern, Pfd.	Southern Pacific
Illinois Central	Southern Railway
Lehigh Valley	Union Pacific

STANDARD STATISTICS 20 PUBLIC UTILITIES

(As of 1929)

American Power & Light	National Power & Light
American Water Works & Elec.	North American Co.
Brooklyn-Manhattan Transit	Pacific Gas & Elec.
Brooklyn Union Gas	Pacific Tel. & Tel.
Columbia Gas & Elec.	Peoples Gas Light & Coke
Commonwealth Power	Public Service of New Jersey
Consolidated Gas (N. Y.)	Southern California Edison
Detroit Edison	Standard Gas & Elec.
Interborough Rapid Transit	Twin City Rapid Transit
International Tel. & Tel.	Western Union Telegraph

NEW YORK TRIBUNE 70 INDUSTRIALS

(As of February 1, 1930)

Air Reduction	Du Pont de Nemours
Allied Chemical	General Electric
American Can	Gillette Safety R.
American Tobacco	International Bus. Machine
Coca-Cola	International Harvester
Eastman Kodak	Johns Manville

Simmons Co.	Calumet & Arizona
Union Carbide & Carbon (new)	Cerro de Pasco
Westinghouse, E. & M.	Kennecott
Houston	Magma Copper
Pan-American Pete, "B"	Phelps Dodge
Pure Oil	American Car & Fdry.
Royal Dutch	Amer. Locomotive
Skelly Oil	Gen. Rwy. Signal
Standard of California	Pullman
Standard of New Jersey	Kress (S. H.)
Standard of New York	Macy (R. H.)
Texas Company	Safeway Stores
Union Oil of Calif.	Sears, Roebuck
American Tel. & Tel.	Woolworth
Columbia Gas	General Motors
Consolidated Gas (new)	Chrysler Motors
Inter. Tel. & Tel.	Hudson
North American	Hupp Motors
Public Service of N. J.	Mack Trucks
Stand. Gas & Elec.	Nash Motors
Western Union	Packard Motors
Bethlehem	Stewart Warner
Crucible	Studebaker (new)
Gulf States	Timken Roller Bear.
Republic Iron & Steel	Borden Co.
United State Steel	California Packing
Vanadium	Corn Products
American Smelting	National Biscuit
Anaconda	Purity Bakeries

NEW YORK TRIBUNE 30 RAILROADS

(As of February 1, 1930)

Atchison	Reading
Atlantic Coast Line	St. Louis-San Francisco
Baltimore & Ohio	Southern Pacific
Canadian Pacific	Southern Railway
Chesapeake & Ohio	Union Pacific
Chicago, Rock Island	Chicago & East. Ill. (pfd.)
Delaware & Hudson	Chi., Mil. & St. P.
D., L. & W.	Erie
Illinois Central	Gulf, Mob. & North.
Louisville & Nashville	Minn., St. P. & S. S. M.
New York Central	Mo., Kansas & Texas
N. Y., Chic. & St. Louis	Missouri Pacific
N. Y., N. H. & Hartford	Wabash
Norfolk & Western	St. Louis & South Western
Pennsylvania	Western Pacific

APPENDIX H

MARKET NEWS FACTORS—

WHEN AND WHERE TO LOOK FOR THEM

ALPHABETICAL INDEX

<i>Item</i>	<i>Date of Publication</i>	<i>Usual Medium</i>
American Petroleum Institute Report on crude oil production and refinery figures	Weekly — Wednesday, before opening of market	News Tickers Daily Press
Automobile Exports Figures furnished by U. S. Department of Commerce	(Advance figures about 15th of month) Final figures about 25th of month	News Tickers Daily Press
Automobile Production Figures furnished by U. S. Department of Commerce	Press release 20th of month	News Tickers Daily Press
Bank of England Rate	Weekly — Thursday, before opening of market	News Tickers
Bank Statement	Weekly — Saturday noon	News Tickers
Brokers' Loans		
Federal Reserve Bank compilations	Thursday 4 P. M.	News Tickers
Brokers' Loans	5th of month, after close of market	News Tickers
Stock Exchange compilations		
Building Construction, New Contracts awarded		
F. W. Dodge reports	Weekly — Tuesday	Daily Press
Business Conditions		
Survey of current business, published by the U. S. Department of Commerce	Weekly — Monday, and monthly about 15th	Daily Press Daily Press
Car Loadings		
American Railway Ass'n report	Weekly — Tuesday	Daily Press

Chain Store Statistics	Monthly about the 15th	
Survey of Current Business published by U. S. Department of Commerce	Reports from private sources issued after first week of month	Financial and Trade papers
Chemical Price Index		
Chemical and Metallurgical Engineering	Weekly — Wednesday	Financial and Trade papers
Coal Production		
U. S. Dept. of Commerce Survey of Current Business	Weekly — Monday, and monthly about 15th	Financial and Trade papers
Commercial Paper Rates	Daily	Daily Press
Copper Exports		
U. S. Dept. of Commerce monthly summary of foreign commerce issued by Bureau of Foreign and Domestic Commerce	About the 25th of the month	Daily Press
Copper Production		
American Bureau of Metal Statistics	11th of month	Daily Press
Cotton, Government weather reports	Weekly — Wednesday	News Tickers
Cotton, Government ginning reports	See Government Schedule	News Tickers
Department Store Sales	Monthly about 15th	Daily Press
U. S. Dept. of Commerce Survey of Current Business	Reports from private sources issued after 1st week of month	Daily Press
Electrical Energy		
Consumption by industries		
Electrical World	First weekly issue of month — Saturdays	Financial and Trade papers
U. S. Dept. of Commerce Survey of Current Business	Weekly — Monday	
Exports		
U. S. Dept. of Commerce, Bureau of Foreign Commerce	Advance figures about 15th of month	Daily Press
	Final figures about 25th of month	Daily Press
Employment Statistics	Weekly—Monday, in Dept. of Commerce Survey of Current Business	Daily Press

	Monthly about 20th, in the Federal Reserve Bulletin and in greater detail in the Dept. of Commerce Sur- vey about the 15th	Daily Press
Failures — Business		
Survey of Current Business	Weekly — Monday	Daily Press
Monthly survey of Current Business	About the 15th	Daily Press
Federal Reserve Banks condi- tion		
Press Releases	Weekly — Friday	Daily Press
Federal Reserve Bulletin ..	Monthly about the 20th	Daily Press
Federal Reserve Bank Rates:		
District:		
No. 1—Boston	Every other Wednesday	News Tickers
No. 2—New York	Weekly — Thursday at 4 P.M.	News Tickers
No. 3—Philadelphia	First & Third Wednesday	News Tickers
No. 4—Cleveland	First & Third Tuesday	News Tickers
No. 5—Richmond	Second Thursday	News Tickers
No. 6—Atlanta	Second Friday	News Tickers
No. 7—Chicago	Weekly — Friday	News Tickers
No. 8—St. Louis	First & Third Wednesday	News Tickers
No. 9—Minneapolis	Second Monday	News Tickers
No. 10—Kansas City	Second & Fourth Thursday	News Tickers
No. 11—Dallas	First Tuesday	News Tickers
No. 12—San Francisco ...	Weekly — Thursday	News Tickers
Gasoline Stocks		
American Petroleum Insti- tute	Weekly — Wednesday	News Tickers Daily Press
Grain Reports	See Government Schedule	News Tickers
Imports	Advance figures about 15th of the month	Daily Press
U. S. Department of Com- merce, Bureau of Foreign Commerce	Final figures about the 25th of the month	Daily Press
Iron and Steel Production:		
Iron Age Report	Thursdays	News Tickers
Bulletin of American Iron & Steel Institute	7th of month	and Daily Press Daily Press
Iron and Steel Exports		
U. S. Department of Com- merce, Bureau of Foreign Commerce	About 25th of month	Daily Press

Iron and Steel prices	Daily (Monthly statistics published first week of month)	Financial and Trade papers
American Metal Market		
Lead Production in U. S. and Mexico	Bulletin issued to financial and trade papers about 11th of month	Financial and Trade papers
American Bureau of Metal Statistics		
Mail Order Sales	About the 15th (Reports from private sources issued after the 1st week of the month)	Daily Press
U. S. Department of Commerce Monthly Survey of Current Business		
Money — Call Money Renewals	Daily except Saturdays	Stock tape at 10:40 A.M.
Money — Time Rates	Daily except Saturdays	Daily Press
Oil — Production of crude and refined petroleum.		
Reports issued by Bureau of Mines	Release to Press 30th month	Daily Press News Tickers
Oil — Stocks on hand at end of month		
Report issued by Bureau of Mines	Release to press 30th of month	Daily Press
Oil — Supply and Demand ...		
Oil and Gas Journal	Weekly — Saturday	Daily Press
Prices — Index of commodity prices		
Irving Fisher Index	Weekly — Monday before opening of market	News Tickers & Daily Press
U. S. Department of Commerce Survey of Current Business	Weekly — Monday	Daily Press
U. S. Bureau of Labor Statistics	Monthly about 25th	Daily Press
Railroad Earnings	Beginning the 20th of the month	News Tickers Daily Press
I. C. C. reports		
Rubber tires, heels, soles, crude stock, etc.		
Bureau of Foreign Commerce Report	About 25th of month	Financial and Trade papers
Rubber Association of America Report	At intervals	

APPENDIX H

821

State of Trade, weekly commercial epitome	Weekly — Saturday	N. Y. Times Annalist Commercial and Financial Chronicle and other financial publications
Steel ingot production		
American Iron & Steel Institute	Press release to trade papers on 7th of month	Daily Press
Steel — Unfilled tonnage of U. S. Steel Corp.	10th of month, at noon	News Tickers Daily Press
Sugar Prices		
U. S. Dept. of Commerce Weekly Survey of Current Business	Weekly — Monday	Financial and Trade papers
Sugar — Stocks on hand		
Statistical Sugar Trade Journal	Weekly — Fridays	Financial and
Willett & Gray reports	At intervals	Trade papers
Supreme Court decisions	Mondays, when Court is in session	News Tickers Daily Press
Zinc Stocks (World)		
New York Metal Exchange	First week of month	Financial and Trade papers

DAILY CALENDAR

MONDAY

Commercial Paper Rate	Daily	Daily Press
Daily Money Renewal	10:40 A. M.	Stock Tape
Irving Fisher weekly price index	Before opening	News Tickers
Minneapolis Reserve Bank Rate	Second Monday of month	News Tickers
New Building Construction ... F. W. Dodge figures	Weekly	Daily Press
Supreme Court decisions	Every Monday when Court is in session	News Tickers Daily Press
U. S. Dept. of Commerce Survey of Business Conditions	Weekly	Daily Press

TUESDAY

Cleveland Reserve Bank Rate	1st and 3rd Tuesday of month	News Tickers
Commercial Paper Rate	Daily	Daily Press
Daily Money Renewal	10:40 A. M.	Stock Tape
Dallas Reserve Bank Rate	1st Tuesday of month	News Tickers
Domestic Oil Output	Oil and Gas Journal	Daily Press
Car Loadings	Weekly	Daily Press

WEDNESDAY

American Petroleum Institute Report on Crude Oil Production	Before opening	News Tickers
Boston Reserve Bank Rate ..	Every other Wednesday	News Tickers
Chemical Price Index	Weekly	Financial paper
Commercial Paper Rates	Daily	Daily Press
Daily Money Renewal	10:40 A. M.	Stock Tape
Iron Age Report (advance in- formation)	1:00 P. M.	News Tickers
Philadelphia Reserve Bank Rate	1st and 3rd Wednesday of each month	News Tickers
St. Louis Reserve Bank Rate.	1st and 3rd Wednesday of month	News Tickers
United States Government Weather Report on Cotton	Every Wednesday	News Tickers

THURSDAY

Bank of England Bank Rate ..	Before opening of market	News Tickers
Brokers' Loans	4:00 P. M.	News Tickers
Commercial Paper Rates	Daily	Daily Press
Daily Money Renewal	10:40 A. M.	News Tickers
Iron & Steel Production, Iron Age Report	1st Thursday of month	Daily Press

Kansas City Reserve Bank Rate	2nd and 4th Thursday of month	News Tickers
New York Reserve Bank Rate	4:00 P. M.	News Tickers
Richmond Reserve Bank Rate	2nd Thursday of month	News Tickers
San Francisco Reserve Bank Rate	Weekly	News Tickers

FRIDAY

Atlanta Reserve Bank Rate ..	2nd Friday of month	News Tickers
Chicago Reserve Bank Rate..	Weekly	News Tickers
Commercial Paper Rates	Daily	Daily Press
Daily Money Renewal	10:40 A. M.	Stock Tape
Federal Reserve Banks Condi- tion	Weekly	Daily Press
State of Trade—Summary of Business	Weekly	Financial Papers

SATURDAY

Weekly Bank Statement	12:00 Noon	News Tickers
-----------------------------	------------	--------------

*Market News Schedules Compiled and Copyrighted by Sutro & Company, and
reprinted by permission.*

APPENDIX I

EXAMPLES OF ARBITRAGE OPERATION

ARBITRAGE AS A RESULT OF SPLIT-UP

On April fifteenth, 1929, F. W. Woolworth Company presented a plan on which stockholders voted May fifteenth to divide each share now outstanding into two and one-half ($2\frac{1}{2}$) shares of *new* stock. Immediately upon the announcement of this capital adjustment a market was established for the *new* shares. These shares, when, as, and if issued, were bid for in this market at eighty-eight (88). The immediate sale of two and one-half ($2\frac{1}{2}$) shares of this new stock, when, as, and if issued, hedged by the purchase of one old share, selling on the New York Stock Exchange at two hundred and twelve (212), constituted the arbitrage. Although stockholders were asked to vote on May fifteenth we conservatively figured June fifteenth as the date on which we would receive the new stock for delivery. Hence, interest was figured for a period of sixty (60) days rather than thirty (30) days as the plan would indicate.

In view of a possible delay by the transfer agent in the delivery of the *new* shares, it is always well to figure the arbitrage extending over a longer period than the dates actually set would indicate, so that the rate of return is definitely assured and in most cases increased because of the shares being delivered within the extension. An illustration follows:

SOLD

2500 shares WOOLWORTH <i>new</i> stock, when, as, and if issued	
at 88	\$220,000.00

BOUGHT

1,000 shares WOOLWORTH old stock at 214	214,000.00
<i>Gross Profit</i>	\$6,000.00

LESS EXPENSES

Commission on 2500 new shares	\$500.00
Commission on 1000 old shares	300.00
Tax	10.00
Total expenses	810.00
<i>Profit</i>	\$5,190.00
Plus dividend received on old shares	\$1,500.00
<i>Net Profit</i>	\$6,690.00

\$6,690.00 returned on an investment of \$214,000 over a period of sixty (60) days is at the annual rate of over eighteen (18) per cent.

If this transaction were conducted on a fifty (50) per cent. margin basis the return would be even greater. The illustration follows:

SOLD

2500 WOOLWORTH *new shares*, when, as, and if issued at 88...\$220,000.00

BOUGHT

1000 WOOLWORTH old shares at 214	214,000.00	
<i>Gross Profit</i>		\$6,000.00
Cash put in	\$107,000	
Debit balance	107,000	

EXPENSES

Interest 10% for 60 days on \$107,000 (Debit Balance)	\$1,783.34	
Commission on <i>new shares</i>	500.00	
Commission on old shares	300.00	
Tax	10.00	
	Total expenses—	\$2,593.34
<i>Profit</i>		\$3,406.66
Plus dividend received on old stock		1,500.00
<i>Net Profit</i>		\$4,906.66

\$4,906.66 returned on an investment of \$107,000 for sixty (60) days is at the annual rate of over twenty-seven (27) per cent.

ARBITRAGE AS A RESULT OF STOCK OFFERING

The ANACONDA COPPER MINING COMPANY announced the privilege of shareholders to subscribe to new Anaconda stock at \$55 per share in the ratio of two (2) new shares for every five (5) shares held. These rights to expire June eighteenth, 1929. Immediately a market was established for this privilege and for the *new shares* (the price of the old share less the value of the right). The immediate sale of one (1) *new share* and one (1) right hedged by the purchase of one (1) old share, constituted the arbitrage. The illustration follows:

SOLD

1000 ANACONDA <i>new shares</i> at \$126	\$126,000.00
1000 ANACONDA rights at \$30	30,000.00
	<u>\$156,000.00</u>

BOUGHT

1000 shares ANACONDA old at \$150	150,000.00
<i>Gross Profit</i>	<u>\$6,000.00</u>

LESS EXPENSES

Commission on 1000 new shares	\$250.00	
Commission on 1000 rights	150.00	
Commission on 1000 old shares	250.00	
Tax	24.00	
	Total expenses ———	674.00
Net Profit		\$5,326.00

\$5,326.00 returned on \$150,000 in three (3) months is at the annual rate of over fourteen (14) per cent. This transaction carried out on a margin basis similar to the previous case, returned at the annual rate of over eighteen (18) per cent.

ARBITRAGE AS THE RESULT OF EXCHANGE OF SHARES IN MERGER

Recently the ANACONDA COPPER MINING COMPANY announced the offer to Common stockholders of CHILE COPPER COMPANY of an exchange of seventy-three (73) shares of ANACONDA COPPER for every one hundred (100) shares of CHILE. The immediate sale of seventy-three (73) shares of ANACONDA hedged by the purchase of one hundred (100) shares of CHILE constituted the arbitrage.

SOLD

730 shares ANACONDA at \$150	\$109,500.00
------------------------------------	--------------

BOUGHT

1000 shares CHILE at \$101	101,000.00
Gross Profit	\$8,500.00

LESS EXPENSE

Commission on 730 ANACONDA	\$182.50	
Commission on 1000 CHILE	250.00	
Tax	14.60	
	Total expenses ———	447.10
Profit		\$8,052.90
Less dividends paid on short contract		1,277.50
Net Profit		\$6,775.40

\$6,775.40 returned on an investment of \$101,000 for three (3) months is at the annual rate of over twenty-six (26) per cent.

ILLUSTRATIONS EXPLAINED

It might be well to explain what actually takes place in these transactions. In the case of ARBITRAGE AS A RESULT OF SPLIT-UP you have sold two thousand five hundred (2500) WOOLWORTH *new stock* when issued, which is not deliverable

until you receive the two thousand five hundred (2500) *new shares* in exchange for the one thousand (1000) old which you purchased, and deposited with the transfer agent.

.

In the case of ARBITRAGE AS A RESULT OF NEW STOCK OFFERING you have sold one thousand (1000) rights (when issued) and one thousand (1000) *new stock*. This *new stock* is really the old stock less the value of the rights. When these rights are issued you will receive for the one thousand (1000) old shares you bought one thousand (1000) rights, which you deliver, and all you have left is one thousand (1000) shares of old stock, less the value of the rights, or the equivalent of the *new stock*, which you also deliver, and the transaction is complete.

.

In the case of ARBITRAGE AS THE RESULT OF EXCHANGE OF SHARES IN MERGER the one thousand (1000) shares of CHILE COPPER are exchangeable for seven hundred and thirty (730) shares of ANACONDA. Consequently you present your one thousand (1000) CHILE to the transfer agent and in return get seven hundred and thirty (730) ANACONDA, which you deliver against your short contract in ANACONDA. However, due to the fact that ANACONDA went ex-dividend while you were still short of the stock, you are forced to pay the quarterly dividend of \$1.75.

.

Arbitrage Examples and Explanation from pamphlet "Arbitrage" by Milton Steinbach, Arbitragist. Hilson & Neuberger, New York, 1929.

APPENDIX J

SLOAN TESTS WITH FIVE DIFFERENT TRADING THEORIES

Period Covered—January 1, 1914–January 1, 1926.

RESULT SUMMARY OF TESTS WITH U. S. STEEL COMMON

	<i>Annual Average Profit.</i>
Test I—Where purchaser places a fixed sum in the stock at the beginning of each year, selling entire commitments January 1, 1926	18.3%
Test II-A—Purchaser buys at exact 1915 low, and holds until January 1, 1926	39.3
Test II-B—Purchaser buys at mean price in 1915–1917 swing	13.0
Test II-C—Purchaser buys at peak price on 1915–1917 swing	5.2
Test III—Purchaser plays for four long swings, catching two-thirds of each, on the average	54.8

RESULT SUMMARY OF TESTS WITH 18 DIFFERENT STOCKS

(Showing annual average percentage gain or loss, under each test, for the 12-year period 1914–1925)

	Test I	Test II-A	Test II-B	Test II-C	Test III
American Can	93.8	127.2	51.5	30.3	309.9
Anaconda Copper	3.4	7.5	1.7	-1.1	28.3
American Cotton Oil	-3.5	-0.9	-2.5	-3.5	31.3
Virginia-Carolina Chem.	-8.7	4.6	-2.3	-4.2	5.8
General Electric	36.9	30.5	24.6	20.1	56.5
Peoples Gas Lt. & Coke	19.4	5.1	4.1	3.2	12.3
National Lead	32.4	40.3	25.5	17.6	58.6
International Paper	30.7	75.2	6.1	-0.1	329.6
American Locomotive	61.6	137.1	39.2	20.5	175.8
United States Rubber	12.5	15.3	10.1	7.0	65.9
Pacific Mail Steamship	2.1	14.3	3.0	-1.5	23.5
American Smelting	24.6	23.5	10.2	4.7	68.7
United States Steel	18.4	39.3	12.9	5.1	54.8
American Sugar Ref.	1.9	3.5	1.7	0.2	17.3
Western Union Tel.	17.9	24.7	13.8	8.3	27.1
American Tel. & Tel.	12.5	10.0	8.3	6.8	10.2
American Tobacco	27.9	26.9	23.3	20.3	40.4
Brooklyn Rapid Transit	-2.2	-5.5	-6.0	-6.4	0.9
Average for Entire Group	21.2	32.1	12.5	7.1	73.2

Sloan Test Results from "Security Speculation—The Dazzling Adventure" by Laurence H. Sloan. Harper & Bros. New York, 1926.

APPENDIX K

DATA ON CHARTS AND STATISTICAL SERIES

THE 60-YEAR STOCK SERIES

Previous to the construction of this series, there was no accurate index of American industrial stock prices dating back very far beyond the opening of the twentieth century. The need for a longer-range series was strongly apparent and the author, then in the Reports Department of the Federal Reserve Bank of New York, undertook to construct a representative series that would show stock market fluctuations over a period of about 50 years. The work was completed early in 1923 and has been brought up to date at frequent intervals.

From 1893 to the present time the index used is based upon the Dow-Jones Index of industrial stocks. The method used in compiling the index previous to the beginning of the Dow-Jones index was to work backward in time from 1898. The identical twelve stocks were used in 1897 which composed the first year's basis for the Dow-Jones index. Figures for two of these stocks were unavailable previous to 1897, however, and were dropped from the average, thus leaving ten stocks previous to that year.

As the average was worked back from year to year it was necessary to substitute other stocks for those whose figures became unavailable or, in some cases, unrepresentative. In making these substitutions an effort was made to select active, representative stocks selling, over a period, at about the same prices as those of the stocks being dropped, and on which quotations would be available over a comparatively large number of years previous to substitution.

In some cases it was necessary to substitute a stock which was selling at near double or half the value of the stock to be dropped. Consistency was maintained in the index in such cases by either increasing or decreasing by one the theoretical number of stocks used in compiling the index.

The average used was a plain arithmetic average of the high and low prices each month for the number of stocks used in the index. No attempt at weighting was made. Nor was there any allowance for cash or stock dividends, or rights, since stock dividends, etc., were comparatively rare and usually of small proportional amounts previous to 1898.

With regard to the averaging of the Dow-Jones index since 1898 a simple arithmetic average of the high and low points each month for the twelve stocks was used until the Exchange was closed in the latter part of 1914. When the market reopened the number of stocks used in the Dow-Jones index was changed from 12 to 20 and there was a consequent disparity between the two series.

In a study of the matter over a period of several years, the Harvard Economic Review has shown the old average to be very near $33\frac{1}{3}$ per cent. higher than the new index. The present method of computing our index, therefore, is to average the high and low figures for the Dow-Jones index of industrial stocks

and to add one-third to this figure. This method has been used from December, 1914 up to the present time. The Dow-Jones series was changed from 20 to 30 industrial stocks on October 1, 1928, but there appears to have been no inconsistency in the change.

The 60-year series consists, therefore, of three distinct parts. The first, from 1872 through 1896, is the original portion of the Federal Reserve Bank research, the sources being Hunt's Merchant Magazine and its accepted successor, the Commercial & Financial Chronicle.

The second part of the series is the original Dow-Jones index of 12 industrial stocks, from 1897 to 1914. The third part is the one now in use, extending from 1914 to date, using the original Dow-Jones figures as a base, but raising them one-third to maintain consistency with the first two sections of the series.

The true Federal Reserve Bank index of industrial stock prices from 1872 to 1930, therefore, is the one shown in Plate 101. In the other chart showing this same index (Plate 72) the original Dow-Jones index is used straight through from 1914 to 1930, without the correction made in the third portion of the Federal Reserve Bank series.

THE PRICE-EARNINGS RATIO SERIES

NATIONAL CITY BANK OF NEW YORK COMPILATION

"Our index includes 170 industrial and merchandising stocks traded in on the New York and out-of-town exchanges. These stocks have been selected so far as possible because of their representative character, with preference given to stocks for which quarterly earnings figures are available and are published promptly. For a small proportion of the stocks the reason for selection was special interest on the part of the bank in those particular issues.

"The ratio has been computed on or around the first of each month since February, 1928, when this computation was begun. Prior to that time and beginning with 1913, it was computed for January 1 of each year, a basis for comparison being thus established. In these back years the number of stocks used varied according to our ability to secure earnings figures. Twenty-five stocks were included from January 1, 1913, to January 1, 1917, when the number was increased to 110. On January 1, 1927, the total was increased to 155, where it remained until August, 1928, when we raised it to the present figure of 170.

"In constructing the ratio the principal problem was to determine what earnings to take, as the basis of comparison. Should we use the definitely known earnings of the previous year, or the estimated earnings for the current year? Obviously, both methods have disadvantages — the one, of using too old a base; the other, of uncertain accuracy.

"In this dilemma (which, of course, applies only to the current ratios, as the ratios for back years could be based on the known figures for a whole year), we took the middle course of using a moving total of the last four quarters for which earnings figures were available. Thus, we have at all times a full year's actual performance on which to base the ratio, yet the figures are reasonably up-to-date and there is no use of estimates. While it is true that this ratio, based on four quarters' earnings, is less sensitive to rapid changes in earnings

than it would be if it were based on the projection of figures for one or two quarters, this may well be a virtue rather than a defect in the eyes of the conservative observer who may wish to see the figures of more than one or two quarters before revising his ideas as to a fair selling price for any given security.

"With the question of the earnings base settled, the procedure was to divide the price by the earnings per share, and then average the ratios thus obtained. This method was considered more satisfactory than the practice of adding up the market values of all the outstanding shares represented in the group and dividing by the aggregate of earnings for those shares for the following reasons: (1) it enables one to follow the ratios for the individual stocks separately from the totals; and (2) it prevents undue weighting of the combined ratio by the figures of a few large corporations.

"In the use of the ratio, however, it is recognized that special circumstances frequently cause a few stocks to sell so far out of line as to influence unduly the final ratio. Consequently, in order to be conservative, we have taken the precaution of excluding the five highest and the five lowest individual ratios, thus rendering the final ratio somewhat more of a median than an average."

Excerpts from "The Price-Earnings Ratio as an Index of Stock Prices," by George B. Roberts, Statistician, National City Bank of New York. Journal of the American Statistical Association. Volume XXIV. Supplement of March, 1929.

Note: — This National City Bank series was discontinued in May, 1929.

STANDARD STATISTICS CO., INC.

The Standard Statistics price-earnings ratio index was begun in 1927, the first of the series being as of May 19, 1927. The series consists of three chief divisions, covering (in 1930) from 500 to 600 individual industrial companies, about 50 public utility concerns, and about 40 railroads. Only the industrial series is shown in Plate 69.

The price-earnings ratio index is calculated monthly, generally around the 20th of the month. The index is based upon earnings of the past year until after the middle of each year, after which a new series is begun in which the monthly figures are based upon estimated earnings for the current year, such estimates being based, in turn, upon interim reports published by the companies, where available.

In 1929, for instance, the July price-earnings ratio figure, based upon 1928 earnings, stood at 15.1. In this month the series began which was based upon estimated earnings for 1929. The first, or July, figure of this new series, showed the price-earnings ratio of only 13.6, due to the larger estimated earnings for most corporations in 1929, as compared with actual reports of 1928 earnings.

APPENDIX L

DESCRIPTION OF A "NEW ERA" IN GREAT BRITAIN OF THE EARLY 18TH CENTURY.

"THE SOUTH SEA BUBBLE"

The South Sea Trading Company was patronized by officials beginning in about 1712. Heavy taxes brought the desire for quick profits "until at last those classes who might have been thought to have possessed the greatest prudential guards against this sort of fascination seemed smitten with a sudden madness of absurd speculation and became the prey of a set of villains."

The speculative fever, which had been developing for some time, was at last taken advantage of by men connected with this South Sea Company, a trading concern established to foster commerce with the Spanish-American possessions and for whaling in the South seas.

Activities were small up to about 1719. About that time the company relieved the Government of undesirable annuities and other obligations and in return received a monopoly and the "favor of the Government." As soon as this measure had passed both Houses of Parliament the stock of the South Sea company jumped to 319 per cent., and "a mad epidemic of speculative gambling seemed at once to seize the whole nation." About two and a quarter millions were sold at around 300 to 340 and a dividend of 10 per cent. was declared, payable in 1720.

"To enable persons to hold, they also offered to lend half a million (Pounds Sterling) on the security of their own stock, and afterwards increased this amount to a million or so." After the announcement of new purchase terms, in June of 1720, the stock sold at 890 per cent.

An intermediate reaction in this march of inflation was met by an issue of "new stock" created at the basis of 1,000 per cent. for the old, subscriptions to be paid in ten installments of £100 each. "In a few days the £100 installment certificates were worth £400."

During these hectic days of false prosperity Bank of England stock went to 260 and East India stock went as high as 445 per cent. "whilst the prices of a host of minor bubbles were dragged up by the success of the greater."

"The pretended value of all the sorts of stock in the scheme-market was, at this time, computed to be equal to £500,000,000; and at this time the rental of all the lands, houses, etc., of the Kingdom was not calculated to exceed £14,000,000 per annum. This, at sixteen years' purchase, gives only £224,000,000, being only half the sum pretended to be employed in these outrageously swindling chimeras."

The smaller bubbles began to burst first. Then the South Sea bubble began to explode on August 13, 1720. Despite the 30 per cent. semi-annual dividend and the guarantee of 50 per cent. dividends for twelve years, the South Sea stock

dropped precipitately to only 175 per cent. "A panic ensued, and all went to the ground together, totally ruining thousands, and nearly dragging the Bank and the East India Company along with it."

The above description is pieced together by the present author, with direct quotations noted, from two volumes on the "South Sea Bubble," one called "Economical Tracts," by Anderson, and the other called "A Financial and Statistical History of England from the Revolution of 1688 to the Present Time," (London 1847), by Thomas Doubleday. It may interest the reader to know that this portion of "Stock Market Theory and Practice" was written in July of 1929.

BIBLIOGRAPHY

A SELECTED READING LIST OF OVER 100 BOOKS ON THE STOCK MARKET AND ALLIED SUBJECTS

- A. B. C. of Bond Buying, The* — Selden.
A. B. C. of Stock Speculation, The — Charles H. Dow. New York, 1900.
American Investment Trusts — J. F. Fowler. Harper, New York, 1928.
Analysis of Financial Statements — H. G. Gathmann.
Art of Speculation, The — Philip L. Carret. 1927.
Articles of Incorporation, By-Laws and Rules of the Stock Clearing Corporation. New York, 1928.
Average Price for Consols for 107 Years. Manchester Statistical Society Transactions. London, 1895-1896.
Badger on Investment Principles and Practice — R. E. Badger. Prentice-Hall, New York, 1928.
Bank Loans and Stock Exchange Speculation — Hollander.
Business Cycles — W. F. Hickernell. New York, 1920.
Business Cycles — Mitchell. New York, 1927.
Business Fundamentals — Babson.
Business and Investment Forecasting — Ray Vance. New York, 1925.
Century of Prices, A — Burton and Seldon.
Common Stocks and the Average Man — J. George Frederick. New York, 1929.
Common Stocks as Long Term Investments — E. L. Smith. New York, 1925.
Constitution of the New York Stock Exchange — New York, 1929.
(With amendments to September 19, 1929.)
Corporate Earning Power — William L. Crum.
Corporation Finance — A. S. Dewing. New York, 1922.
Corporation Finance — Edward S. Mead. New York, 1920.
Corporation Profits — Laurence H. Sloan.
Crowell's Dictionary of Business and Finance.
Cycles of Speculation — Thomas Gibson. New York, 1907.
Dealings in Securities on the New York Stock Exchange (pamphlet). N.Y.S.E.
Early History of Wall Street — O. G. Villard. New York, 1897.
Elements of Speculation — Thomas Gibson. New York, 1913.
Fifty Years in Wall Street — Henry Clews. New York, 1908.
Financial and Business Forecasting — W. F. Hickernell. New York, 1928.
Financial Crises and Periods of Industrial and Commercial Depression — New York, 1907.

- Financial History of the United States* — D. R. Dewey. New York, 1903.
- Financial Organization and Management* — C. W. Gerstenberg.
- Financial Policy of Corporations, The* — A. S. Dewing.
- Forces Behind the Market* — W. F. Hickernell.
- Forecasting Business Conditions* — Hardy and Cox. New York, 1927.
- Forecasting Stock Market Trends* — K. S. Van Strum. 1928.
- Forty Years of American Finance* — A. D. Noyes. 1909.
- Fundamentals of Investment* — S. O. Rice (Editor) McGraw-Hill. New York, 1925.
- History of Business Depressions* — Otto C. Lightner. London.
- History of the New York Stock Exchange* — H. G. Hemming. New York, 1905.
- History of the New York Stock Exchange* — E. C. Stedman. New York, 1904.
- How to Read a Financial Statement* — H. G. Stockwell. New York, 1927.
- Interest Rates and Stock Speculation* — Owens and Hardy. New York, 1925.
- Introduction to Statistical Methods* — Secrist. 1921.
- Investing in Foreign Securities* — G. W. Edwards. 1925.
- Investing for Profits* — Barker.
- Investment* — Hastings Lyon. Houghton, 1926.
- Investment Analysis* — W. E. Lagerquist. 1921.
- Investment Banking in England* — Nash. New York, 1924.
- Investment Policies that Pay* — Ray Vance.
- Investment and Speculation* — Guenther.
- Investment Trust, The* — L. M. Speaker.
- Investment Trust Organization and Management* — L. R. Robinson. Ronald. New York, 1929.
- Investment Trusts* — W. H. Steiner and J. M. Chapman. Adelphi, 1928.
- Investment Trusts in America* — M. H. Williams. Macmillan, New York, 1928.
- Investment Trusts: Their Origin, Development and Operation* — T. S. Grayson. Wiley, New York, 1928.
- Investments* — D. F. Jordan. Prentice-Hall, New York, 1927.
- Investments and Speculation*, vol. 9. Alexander Hamilton Institute.
- Lombard Street* — Walter Bagehot. London, 1910.
- London Stock Exchange, The* — T. E. Haydon. London, 1901.
- Materials of Corporate Finance* — C. W. Gerstenberg. New York, 1915.
- New York Call Money Market, The* — Barton Griffiss.
- New York Stock Exchange* — Martin.
- New York Stock Exchange, The* — E. C. Stedman (editor).
- New York Stock Exchange* — Annual Reports of the President. New York, annually.
- New York Stock Exchange, The — History and Organization.* N. Y. S. E. 1926.
- New York Stock Exchange Year Book* — New York, annually.

- Pitfalls of Speculation* — Thomas Gibson. New York, 1909.
- Practical Hints for Investors* — Walter Van Riper. 1926.
- Prices of Consols 1790-1909* — A. H. Gibson. London.
- Principles of Bond Investment* — Laurence Chamberlain and G. W. Edwards. Holt, New York, 1927.
- Principles of Economics* — F. W. Taussig. 2 vols. New York, 1911.
- Principles of Investment* — J. E. Kirsham. A. W. Shaw, 1924.
- Principles of Investment* — A. M. Sakolski. Ronald, New York, 1925.
- Principles of Political Economy* — John Stuart Mill. London, 1848.
- Profitable Investing* — John Moody. Forbes, New York, 1925.
- Profits of Panics, The* — London, 1866.
- Psychology of the Stock Market, The* — G. C. Selden, New York, 1912.
- Reserve Banks and the Money Market, The* — W. Randolph Burgess. New York, 1927.
- Rules Adopted by the Governing Committee of the New York Stock Exchange.* — New York, 1929.
- Security Speculation, The Dazzling Adventure* — Laurence H. Sloan. New York, 1926.
- Security Syndicate Operations* — Arthur Galston. New York, 1928.
- Short Sales of Securities on the New York Stock Exchange* — Dewey.
- Speculation and the Chicago Board of Trade* — J. E. Boyle.
- Speculation and Gambling* — McMath.
- Speculation on the New York Stock Exchange* — Osborne.
- Speculation on the Stock and Produce Exchanges of the United States* — H. C. Emery. New York, 1898.
- Stock Clearing Corporation, Description of Operation* — Samuel F. Streit. N. Y. S. E., 1927.
- Stock Exchange in Relation to the Public, The* (an address) — Jason Westfield. N. Y. S. E., 1924.
- Stock Market, The* — C. A. Dice. New York, 1926.
- Stock Market, The* — S. S. Huebner. New York, 1922.
- Stock Movements and Speculation* — F. D. Bond. New York, 1928.
- Stocks and Shares* — Hartley Withers. London, 1910.
- Story of a Street, The* — F. T. Hill. New York, 1908.
- Story of Wall Street, The* — R. T. Warshow. Greenberg, New York, 1929.
- Successful Speculative Investment* — Arthur I. Bean.
- Successful Stock Speculation* — Butler.
- Theory of Stock Exchange Speculation* — Arthur Crump. London, 1887.
(Since reprinted in America.)
- Thirty Years of American Finance.* New York, 1898.
- Twenty-Eight Years in Wall Street* — Clews.
- Understanding the Stock Market* — Allison Cragg. New York, 1929.
- Valuation of Industrial Securities* — R. E. Badger. 1927.
- Wall Street Procedure* — D. C. Eggleston.

- Wall Street and Washington* — J. S. Lawrence.
What Every Investor Ought to Know — Robert Smitley. New York.
Work of the Stock Exchange — J. Edward Meeker. Ronald Press. New York.
Work of Wall Street, The — Sereno S. Pratt. New York, 1921.
You and Your Broker — Robert Smitley.

INDEX

INDEX

Abbreviations

used in reporting bond transactions, 450

(*see also* Symbols)

Account (*see* Brokerage account; Discretionary account; Interest account; Margin account)

Accounting (*see* Corporation, accounting)

Accounts payable

as item on balance sheet, 386

Accounts receivable

as item on balance sheet, 387

Accrued interest

as item on balance sheet, 386

Accrued profits, 411

Accrued Taxes

as item on balance sheet, 386

Accumulation, 705 (*see also* Chart formations)

as phase of stock market cycle, 677

chart formations indicating

ascending bottom, 602, 610

broadening bottom, 602, 618

common up turn, 602

complex bottom, 602, 616

example of, 617

double bottom, 602

example of, 612, 615

head and shoulders bottom, 602, 682

quadruple bottom, 614

triple bottom, 614

triangular bottom, 602

example of, 606, 637

signs of, 677 (*see also* Pool operations)

Accumulations, 316

Action of stock (*see* Stock)

Advertising

as factor in good will, 384

fraudulent, 445

Advisory service (*see* Market advisory service)

Agreements, 506

customer's, sample, 8, 45

discretionary trading, 286

general demand loan, 226

new loan, 233

return loan, 236

time loan, 221

voting trust, 339

(*see also* Brokerage account; Clearing House; Options)

Airplane stock, 375

Alleghany Corporation, convertible bonds, 324

Allotment sheet, 111

American Agriculturist, 444

American Brown Boveri Corporation, 317

American Institute of Finance, 438

American Locomotive Company, 397

American Sugar, Chart of common stock, 604, 605

American Superpower Corporation, 365

American Telegraph and Cable Company, 419

American Telephone and Telegraph Company, convertible bonds, 324

American Woolen Company,

book value of stock, 393

common stock, 418, 630, 631

Amusement companies

luxury or "depression-proof," 375

Analysis, market (*see* Market analysis)

Analysis of investment trusts, 670

Analysis of stock, 372, 401, 420, 518

balance sheet, 384, 387

book value, 404

capitalization, bonds vs. stock, 378

company's business, 373, 377

as factor in market movements, 460

financial statements as form of publicity, 420

management as factor in, 373

nature of, in judging value, 373

new invention industries, 375

seasonal influence, 374

competition as factor in, 373

- depression-proof stock, 375
- earning statements as factor in, 397
- earnings vs. balance sheet items, 392
- earnings vs. dividends in, 411
- fundamental factors in, 372, 402
- graphic form of, 421
- importance of statements, 393
- liquidating companies and, 400
- market for stock as factor, 420
- price-earnings ratio, 405-6, 407
- price factor, 402
- public interest as element in, 518
- size of stock issue as factor in, 381
- sources of information as important factor, 427
- supply and demand affecting, 373
- supply and demand as factors in, 373
- Analysts, 406
- Analyzing (*see* Analysis of stock; Market analysis)
- Annalist*, 434
 - average of 50 stocks, 681
 - use of, in chart making, 599
- Arbitrage, 532
 - dangers of, 535
 - example of, 534
- Arithmetic scale (*see* Charts)
- Armour and Company of Illinois*, 418
- Artificial manipulation
 - as indicated by shake-out, 644
 - as indicated by triangle formation, 622
 - (*see also* Charts)
- Artificial technical factor
 - banking operations, 582
- Ascending bottom, 602, 610
- Ascending intermediate triangle, 630, 632, 634
 - example of, 633
- Ascending peak, 634
- Ascending triangle, 628, 632
- Asked price, 54, 448
- Asset value, 411
- Assets
 - in corporation balance sheets, 385
 - current assets, 384, 386-387
 - fixed, 384
 - good-will, 384
 - "hidden assets," 391
 - intangible assets, 385, 390
 - liquid, 384
 - tangible, 384
- Assignee, 333
- Associated Stock Exchanges*, 38, 296
- "At the close," 205
- "At the market," 55
- "At the opening," 205
- "At three days," 87
- Authorized capitalization, 321
- Automatic accounting machines, 127
- Automobile corporations
 - capitalization, 378
- Average indexes, 663
 - Annalist*, 681
 - credited, 685
 - Dow Jones*, 695
 - general market, 680
 - long-term index, 72, 101, 674
 - of 50 stocks, 681
- Average price, 664
- Averaging
 - advantages and disadvantages of, 501
 - dangers of, 503
 - definition, 501
 - "Averaging down," 500
- Averaging operations, illogical, 502
- "Averaging up," 501
- "Away from the market," 197
- "B-30," 87
- Babson Statistical Service*, 438
- "Back dividends," 316
- Balance sheet
 - analysis, 383
 - analysis of, before purchasing stock, 377
 - as good publicity, 373
- assets, 384
 - current, 384
 - fixed, 384
 - intangible, 384
 - liquid, 384
 - tangible, 384
- assets and liabilities as shown on, 385-386
- "balance sheet position," 387
- book value of stock, 404
- calculating book value of stock from, 390
- common stock and surplus, 389
- description of, 383
- General Motors Corporation*, 388
- good will entry, 385
- "hidden assets," 391
- inventory as current assets, 387
- liability side, 386
- make-up of, 384

- profit and loss surplus, 386
- reserves as item on, 390
- surplus, 387
- Balance to deliver, 99
- Balance to receive, 99
- Balances
 - debit and credit interest balances, 272
 - (see also Debit; Credit)
- Bank of England* stock chart, 1697-1928, 703
- Bank rate, 474, 476
 - in relation to open market interest rates, 476
- Banking interests
 - action of, 584
 - market support, 530
- Banking operations, 583
 - effects of, 583, 584
 - forms of, 584
- Banking support
 - close up chart of, 588
 - example of, 586
- Banks
 - as registrars of stock, 332
 - as sources of credit, 216
 - as sponsors of individual stocks, 583
 - as supervisors of voting trust agreements, 339
 - as transfer agent, 332
 - influence in call money rate, 243
 - use of Clearing House machinery, 137
- Barron's Weekly*, 434, 444
- "Bear," 171
- Bear market, 530, 668
 - as affecting the long-pull investor, 698
 - buying on a scale down, 705
 - characteristics of beginning, 696
 - characteristics of end, 697
 - price-earnings ratio and, 416
 - profits in, 185
 - reversals, 702
 - secondary recovery in, 531
- Bear pools (see Pools, bear)
- Before taxes, 401
- Better Business Bureau* (see *National Better Business Bureau*)
- Bid price, 54, 448
- Bidding, 64
- Bill of sale, 262, 263
- "Blotter," explanation of term, 96
- Board boys, 42
- Bond
 - definition of, 3
 - drawings, 308
 - prices
 - as stock index, 694
 - Dow-Jones* index, 694
- Bond market
 - abbreviations used in reporting, 450
 - bond page, sample of, 452
 - selling short, 451
 - unit of trading, 450
- Bond page
 - sample of, 452
- Bond ticker, 450
- Bond yields, 412
- Bonds
 - as means of raising money, 304
 - bond market ticker, 75
 - book, 212
 - callable, 309
 - closed mortgages, 305
 - collateral, 306
 - consolidation mortgage, 305
 - convertible, 322, 323
 - conversion at scale price, 324
 - conversion into stock, 324
 - conversion time limit, 322
 - example of, 323
 - corporation, 305
 - coupon or bearer, 310
 - coupons as interest, 310
 - debenture, 306
 - deferred delivery, 450, 451
 - delivery of, 450, 451
 - equipment, 307
 - ex-warrants, 325
 - first mortgage, 305
 - floating the issues, 307
 - gold, 306
 - government bonds as security for
 - loan, 219
 - how issued, 305
 - inactive, 212
 - installment repayment of, 308
 - interest on, 310, 311, 312, 452
 - junior, 305, 306
 - limited number accepted for clearance, 94
 - long term, maturity of, 309
 - maturity dates of, 310
 - open end mortgage, 305
 - ownership certificate, 310
 - ownership of, 310
 - perpetual, 309

- price, "flat," 312
- prior claim of, 305
- profit-sharing, 307
- redeemable, 309
- refunding, 306
- registered, 311
- renewal of, 306
- reporting of, by ticker, 75
- retirement of, 307, 308
- second mortgage, 305
- security of, 305
- selling short, 451 (*see also* Deferred delivery)
- serial issues, 308
- short-term, 309
- sinking fund, 308
- tax-free, and the ownership certificate, 310
- types of, 305
- unit of trading, 450
- unsecured, 305
- vs. stocks as investment, 304, 305, 313
- warrant, 325
 - conversion, 327
 - non-detachable, 327
 - non-transferable, 327
 - notice of redemption, 327
 - redemption prior to maturity, 327
- yield, 412
- Book bonds, 212
- Book value, 389, 404
 - in relation to earnings, 405
 - margin of increase, 404
 - method of calculation, 388, 389, 390
 - theoretical, 391
- Books of record, 346
- "Bootleg loans," 472
- Borrowed stock, 172
 - security for, 175
- Boston Advertiser*, 444
- Boston Evening Transcript*, 444
- Boston Globe*, 444
- Boston Herald*, 444
- Boston News Bureau*, 444
- Boston Post*, 444
- "Both ways," commissions, 270
- Bottom
 - of cycle, 661
- Break away gap (*see* Gap)
- Broadening bottom, 602, 618
- Broadening top, 602, 618, 620, 682
 - example of, 620
- Brokerage account
 - balancing of, 265, 271, 276
 - individual items of, 273
 - opening of, 44
 - (*see also* Interest account; Discretionary account; Brokerage statement)
- Brokerage houses, 38-58, 583
 - "blotter," 96
 - branch offices, 39
 - credit balance, 44
 - customers' man, 43
 - customers' room, 41
 - description of office, 42
 - discretionary traders, 285
 - list of, 299
 - mail order business, 249
 - market letter, 440
 - influence of, 441
 - odd-lot houses, 191
 - opening account with, 44
 - order forms used, 250, 253 (*see also* Order)
 - rise of, 38
 - stock board, 42
 - types of, 40, 41
- Brokerage letter (*see* Brokerage houses, market letter)
- Brokerage statement, 263, 264, 265
 - checking, 281
 - example of, 264, 268
 - opening balance, 280
 - return receipts, 282
 - short balance items, 278, 279
- Brokers
 - commission, 34, 35
 - commissions, 270, 283, 296, 297
 - credit position of, as affected by daily settlements, 224
 - dealing with, 245-288
 - development of, 12
 - economic value, 12, 14
 - floor trader, 34
 - "free lance" (*see* "Two-dollar broker")
 - frozen inventory, 216
 - loan envelope, 221
 - loans (*see* Loans, brokers')
 - margin, 220
 - marginal trading, 148
 - money broker, 221
 - odd-lot dealer (*see* Odd-lot dealer)
 - private life of, 36
 - reliability, 299
 - report forms, 255

- signal system for, on floor of Exchange, 62
- specialist, 34
- stock brokers, definition of, 13
- syndicate, 216
- time loan agreement, 221
- "two-dollar," 34
- types of, 34-36 (*see also* Dealers)
- Brooklyn Daily Eagle*, 444
- Brookmire Economic Service*, 438
- Buffalo, Niagara and Eastern Power Corporation*, 342
- "Bulge," 704
- "Bull," 171
- Bull market, 530, 531, 537, 693
 - and growth of tipping service, 437
 - breaks in, 702
 - danger of overconfidence in, 548
 - evidences of weakening in, 694
 - failure of cyclical theory in, 663
 - major, 600, 693
 - price-earnings ratio and, 416
 - selling on scale up, 705
 - (*see also* Pools; Prices; Charts; Trends)
- Bull pools (*see* Pools)
- Bunched orders, 220, 489, 490
- Business
 - company's (*see* Analysis of stock)
 - effect of interest rates on, 675
 - forecasting, 673
 - future as indicated by stock market, 673
 - (*see also* Business indexes)
- Business cycle (*see* Cycle)
- Business indexes
 - analysis of, 466
 - as barometers of stock market prices, 462
 - base of, 461
 - chief factors affecting trend of, 464
 - forecasting reversal of, 464
 - intermediate reaction, 467
 - production as factor in, 465
 - reverse swings, 462, 464, 465, 466
 - supply of credit as affecting, 465
 - value of, in forecasting the market, 461
 - value in long-pull buying, 462
- Business trends (*see* Business indexes)
- "Buy or cancel," 57
- Buy pads
 - sample of, 53
- Buyer's options, 87 (*see also* Options)
- Buyer's receive ticket
 - sample of, 98
- Buying at support levels, 542
- Buying in, 182
- Buying long (*see* Long buying)
- Buying of stock (*see* Stock purchase; Trading)
- Buying orders (*see* Orders, buying)
- Buying power
 - as indicated by savings deposits, 477
- Buying stock long, 162
- California Stock Exchange*, 294
- Call, 504, 506
- Call boards, 30
- Call loans (*see* Loans)
- Call money
 - as index to market conditions, 468
 - daily settlements as basis for, 85
 - demand, 229, 231
 - money committee, 240
 - origin of supply, 229
 - rate
 - importance of, 676
 - influence of banks on, 243
 - relation to other rates, 674
 - renewal, 240, 241, 242
 - supply, 231
 - time money rates as effecting, 469
 - (*see also* Credit)
- Call price
 - on participating preferred stock, 319
- "Call" trading, 26
- Callable bonds, 309
- Calling a loan, 179
- Calling turns
 - for long-swing operator, 671
- Campaign (*see* Long-swing campaign; Stock campaign)
- Cancel pad, 55, 253
- Cancellation form, 57
- Cancelling
 - limited orders, 483
- Capital
 - liability, 321
 - raising of, 14
 - reserves, 390
 - working, method of calculating, 386
- Capitalization
 - as shown in balance sheet, 377
 - authorized, 321
 - bonds vs. common stock, 378
 - bonds vs. stocks, 381
 - outstanding, 321

- size of stock issue, 381, 382
- types of corporate security, 3
- Cash as a commodity* theory, 168
- Cash extensions, 101, 104, 105, 262 (*see also* Bill of sale)
- Cash trade, 87, 449
- Central delivery system, 122
- Central delivery ticket, 123
- Central deposit bureau for securities, need of, 127
- Central Quotation System, 252
- Century Magazine*, 444
- Cerro de Pasco*, chart of common stock, 635
- Certificates (*see* Stock certificates)
- Chamberlain, Lawrence*, on bond investment, 309
- Chart formations
 - accumulation indicators, 602 (*see also* Accumulation)
 - applying to general market, 677
 - ascending bottom, 602, 610
 - broadening bottom, 602, 618
 - broadening top, 602, 618, 682
 - common turn, 602, 604, 682
 - complex bottom, 602, 616, 617
 - complex top, 602, 616, 619, 682
 - continuation, 636
 - descending top, 602, 610, 612, 613, 682
 - distribution indicators, 602 (*see also* Distribution)
 - double bottom, 602, 612, 615
 - double top, 602, 612, 614, 682
 - example of, 615
 - false move, 644
 - and closing prices, 646
 - defense against, 645
 - growing irregularity on high volume, 637
 - example of, 639
 - head and shoulders, 602, 604, 682, 689
 - intermediate reversal, 636
 - quadruple top, 612, 614
 - summary of seven major, 620, 656
 - triangle or coil, 604
 - importance of, 622
 - time element in, 622
 - triangular bottom, 602, 606, 637
 - triangular top, 602, 608, 682
 - types of
 - ascending, 628
 - descending, 628
 - symmetrical, 628
 - triple top, 612, 614
- (*see also* Chart reading and individual listings)
- Chart making
 - beginning of, 599
- Chart paper, coordinate, 594
- Chart plotting
 - arithmetic vs. logarithmic movement
 - example of, 598
 - arithmetic vs. logarithmic scale
 - example of, 596
 - logarithmic scale
 - advantages of, 597
 - disadvantages of, 598
- Chart reader
 - importance of triangle to, 626
- Chart reading, 591-621
 - dangers of, 592
- Chart trading
 - gap or spread, 650
 - break away, 650
 - chart examples of, 654
 - exhaustion, 652
 - intermediate or common, 653
 - on support point, 641
 - principles of, 622-657
 - resistance and support levels, 640
 - resistance level broken, 643
 - support level broken, 641
 - technical trend, 647
 - illustrating, 649
- (*see also* Chart formations)
- Charts
 - as aid to memory, 592
 - as aid to technical analysis, 591
 - close up on banking support, 588
 - coordinate chart paper, 594
 - daily, advantages of, 593
 - daily stock from 1926 through 1929, 681, *opp. p.* 683
 - Dow-Jones Bond Average*, 695
 - gaps in general market, 684
 - general market, importance of, 677
 - importance of, 560
 - importance in detecting pool manipulation, 580
 - making one's own, 599
 - of secondary reaction, 589
 - on Bank of England stock, 703
 - proper scale for, 595
 - ready made, where to buy, 600

- scale of, arithmetic vs. logarithmic, 595
- secondary reaction, example of, 588
- stock, types of, 593
- thirty year analysis, 678
- types of, 593
- use of, in detecting pool manipulation, 601
- what to include on, 594
(*see also* List of Illustrations)
- Chicago Board of Trade*, 293
- Chicago Curb Exchange*, 293
- Chicago Curb Exchange Association*, 293
- Chicago Herald Examiner*, 444
- Chicago Stock Exchange*, 292
- Chicago Tribune*, 444
- Christian Science Monitor*, 444
- "*Chronicle*," 434 (*see also* *Commercial and Financial Chronicle*)
- Chrysler Motors*
charts on common stock, 618, 620, 632, 633, 634
- "*Cleared*" stocks, 93, 94
- Clearing Corporation (*see* Clearing House)
- Clearing House, 79-92
accounts "*to prove*," 107
advantages of, 84
allotment sheet, 111
as agent in brokers' loans, example of, 232
as agent in transference of loans, 237
as a system of saving or economy, 141
"*balance to deliver*," 99
"*balance to receive*," 99
bond clearance, 94
cash extensions, 101
Central delivery system, 122
Central deposit bureau, need of, 127
clearing sheet, 101
comparison exchange tickets, 95
comparison slip, 88
control sheet, 118
credits and debits, control of, 119
daily settlements, 85, 86
Day Clearing Branch, 113-142 (*see also* Day Clearing Branch)
debit for receipt of stock, 130
delivery price, 102
development of, 79
direct delivery of stock, 136
exchange of comparisons, 89, 94, 98
exchange tickets, 98, 133
"*ex-clearing house*," 87, 94
ex-clearing stock, delivery of, 132
"*giving a name*," 112
history of, 88
history of system, 89, 90
loan clearance, 139, 140, 237
loans, withdrawal of collateral during period of transfer, 141
N. Y. S. E. rule for comparison of trades, 89
Night Clearing Branch, 92-112 (*see also* Night Clearing Branch)
night clearing sheet, 99
cash extensions, 104
organization of, 26
receive ticket, 97
regular or cleared stocks, 93
reservoir of credit, 141
saving in time and money, 141
settlement, periods of, 85
settlements, practice in Europe and America, 85, 86
stock receipt, 129
stock transfer department, 138
term settlements, 85, 86
use of, by banks, 137
Clearing money, 91
Clearing of stock (*see* Stock, clearing; Clearing House)
Closed mortgages, 305
"*Closed out*," 183, 280
Closing prices (*see* Prices)
Coca-Cola, good-will advertising, 384
Coil, 604
importance of, 622
Collateral bonds (*see* Bonds)
Collateral loans (*see* Loans)
Collective delivery ticket, 123, 124
sample of, 125
Commerce and Finance, 434
Commercial and Financial Chronicle, 434
use of, in chart making, 599
Commercial loans (*see* Loans)
Commercial paper rate
relation of call money rate to, 674
Commission
"*both ways*," 270
Commission broker (*see* Broker)
Commission firms, 583
Commissions, 283, 297
curb brokers, 296
settling of, by Day Clearing Branch, 139

- Commitment
 - long-swing, 659
 - short-pull, 659
- Common down turn, 602, 604, 682
- Common stock
 - and surplus, 389
 - as affected by accrued profits, 411
 - as item in corporation balance sheet, 386
 - book value, 389
 - calculation of, 390
 - buying for long-pull investment, 667
 - classes of, 320
 - definition of, 3, 4
 - dividends, 347
 - misunderstanding of, 347
 - "Little Willie," 331
 - market value on dividend date, 352
 - profits as influenced by bonds, 381
 - substitution of Class A for preferred stock, 320
 - value of, dependent on corporation profits, 348
 - vs. preferred stock, 319
- Common turn, 604
- Common up turn, 602
- Company's business (*see* Analysis of stock)
- Comparison exchange tickets, 95
- Comparison slip, 88, 95
- Compilations (*see* Loans, brokers')
- Complex bottom, 602, 616
 - example of, 617
- Complex top, 602, 616, 682
 - example of, 619
- Confirmation slip, 185
- Consent form, sample of, 45
- Consolidation mortgage bonds, 305
- Contingent credit (*see* Credit)
- Contingent debit list, 116
 - pledge, sample of, 131
- "Continuous market," 26
- Control sheet in clearing house operation, 118
- Conversion price
 - of convertible preferred stock, 327, 328
 - on warrant bonds, 327
- Conversion time limit, 322
- Convertible bonds (*see* Bonds)
- Convertible preferred stock (*see* Preferred stock)
- "Corner," 497 (*see also* Stock corner)
- Corporate capital, ways of raising, 304
- Corporate security
 - types of, 303-345 (*see also* Bonds; Common stock; Preferred stock)
- Corporation
 - accounting
 - automatic accounting machines, 127
 - dividends in relation to net profits, 408
 - margin of reserves, 408
 - net profits in relation to dividends, 408
 - percentage of net profits which should be paid out as dividends, 408
 - assets, 385
 - balance sheet (*see* Balance sheet)
 - capitalization (*see* Capitalization)
 - earnings, 377
 - as basis of value of stock, 359
 - as check on intangible assets, 385
 - decline in stock as reflecting, 417
 - effect of stock dividends on surplus earnings, 356
 - management as factor in, 376
 - trend of, 672
 - financial status as reflected in balance sheet and earning statement, 395
 - interim statement (*see* Earning statement)
 - liabilities, 386
 - net income, 395, 396
 - net worth, 389
 - note, 312
 - ownership of, by public, 8
 - profit taxes, 401
 - profits, influence on stock market movement, 460 (*see also* Profits)
 - reserves, margin of, 408, 409
 - surplus worth, 387
 - working capital, 386
- Coupled order (*see* Order)
- Coupons, as interest on bonds, 310
- "Cover," 179, 184
- Covering transaction, 174
- Cranks, 439
- Credit, 216
 - a factor in stock trading, 143
 - and ownership theory, 144
 - as factor in market movements, 468
 - brokers' loan ratio index, 474
 - call money market as index to, 468
 - charges in short selling, 185

- contingent lists for ex-clearing stock, 134
- controlled by Stock Clearing Corporation, 119
- demand, 244
- effect of brokers' loans on, 472
- extended by Stock Clearing Corporation, 119
- Federal Reserve system as reservoir of, 476
- indexes, 468
- instruments, 468
- interest rates in demand loans, 238
- marginal trading as form of, 145, 146
- money crowd, 228
- record of, in Day Clearing Branch, 118
- rediscount rates as index of, 477
- sources of, 216, 217
- supply of, as affecting business trends, 465
- tight, 466, 468, 675
- time money as index to, 469
- unsecured, 238
- unsecured day loans as form of, 83
- use of, by speculators, 144
- use of, in short selling, 166
- (*see also* Call money; Stock Exchange, credit)
- Credit balance, 44
- Credit conditions
 - call money rate and, 674
- Credit instruments, 468
- Credit situation
 - as technical factor, 676
 - brokers' loans as index to, 469
 - in studying market, 674
- "Crowd," 206
- Cumulative dividends in preferred stock, 316
- Current assets (*see* Assets)
- Current liabilities, 386 (*see also* Liabilities)
- Customer's agreement, sample of, 45
- Customer's bill of sale, 263
- Customer's limited G. T. C. order confirmation, 257
- Customers' man, 43
- Customer's monthly statement, sample of, 268
- Customer's purchase confirmation, 256
- Customer's purchase report slip, sample of, 67
- Customers' room, 41
- Customer's sales report slip, 67
- Cycle
 - completion of, 662
 - definition of, 661
 - law of, 663
 - parts of, 661
 - production and consumption as factors in, 466
 - public psychology as factor in, 480
 - stages of, 661, 693
 - stock market, 661
 - stock market, periods of, 677
 - theoretical, by Dr. Hickernell, 661
 - time for completion of, 662
 - upward move, 661
 - (*see also* Cycle theory)
- Cycle theory
 - advantages of, 663
 - limitations of, 662
- Cyclical high point, 663
- Cyclical low point, 663
- Cyclical swings in general market, 660
- Daily settlements, 85-86, 223-224
- Daily stock chart
 - 1926 through 1929, 681
- Day Clearing Branch, 91, 92, 94, 100, 113-142
 - as agent in brokers' loans, example of, 232
 - automatic accounting machines, 127
 - bookkeeping system, 116-121
 - cash extension balance, 116
 - central delivery system, 122
 - central deposit bureau, 128
 - closing, 118, 119
 - connection of operation with night branch, 115
 - contingent credit and debit lists, 116, 117, 130
 - contingent debit list, 116
 - pledge, 131
 - control sheet, 118
 - credit, record of, 118
 - credits and debits, 119
 - delivery of securities, 121, 122, 124, 130
 - delivery ticket, 126
 - exchange tickets, 98, 133
 - ex-clearing stocks, delivery of, 132
 - failed to deliver, 118
 - final receipt, 120
 - loan clearance, 139
 - non-member banks, 137

- operation (complete description of), 112, 113, 142
- physical make-up, 117
- "proves," 116
- reservoir of credit, 141
- savings by clearing money payments, 114
- savings represented by, 141
- scope of, 115
- settling of commissions, 139
- "slate," 118
- stock receipt, 129
- stock transfer department, 137
- three way central delivery ticket, 126 (*see also* Clearing House)
- Day loans (*see* Loans)
- Day order, 57
- Dealers, odd-lot (*see* Odd-lot dealers)
- put and call, 508
- the "specialist," 189 (*see also* Traders)
- Dealing with broker, 245-288
- Debenture bonds, 306
- rate of interest on, 306
- Debit balances, 266
- interest on, 158
- proving of, 265
- Debit for receipt of stock, 130
- Debits and credits in stock clearance, 119
- ex-clearance stock, 134
- Declines in market
- explanation of, 485
- extent of, in 1929 panic, 685
- making money during, 165
- of stock, 537
- resisted by banking interests, 584
- secondary recovery in, 590 (*see also* Stock market, decline in)
- Deferred delivery on bonds, 450, 451 (*see also* Bonds, selling short)
- Deflation
- as element in business cycle, 661
- as stage of stock market cycle, 677
- Deliver and receive balance tickets, 112
- Deliver balance ticket
- sample of, 110
- Deliver credit ticket for "ex-stocks," 137
- Delivery of stock
- between brokers, 121
- central delivery system, 122
- credit for delivery, 125
- "good delivery," 173
- Delivery price, 102
- importance of, 106
- Delivery trading
- rules for, 86-87
- Demand loan agreement, 226
- Demand loans (*see* Loans)
- Depletion
- as factor in stock analysis, 400
- charges in mining companies, 399-400
- definition of, 399
- liquidating companies and, 400
- rate, 399
- Depreciation
- as factor in stock analysis, 400
- definition of, 398
- rate, 399
- reserve for, 390
- use in hiding assets on balance sheet, 391
- Depression
- as phase of stock market cycle, 677
- as stage of business cycle, 661
- depression-proof stock, 375
- descending intermediate triangle, 634
- Descending bottom, 634, 635
- example of, 635
- Descending intermediate triangle, 630
- example of, 631
- Descending top, 602, 610, 612, 682
- example of, 613
- Descending triangle, 628
- example of, 630, 631 (*see also* Descending intermediate triangle)
- Direct delivery of stock, 136
- Discounting the future, 513, 514, 515, 522
- Discretionary account, 287
- Discretionary investment trust, 671
- Discretionary traders, 285
- Discretionary trading agreement form, 286
- Distribution, 705
- as stage of stock market cycle, 677
- chart formations indicating
- broadening top, 602, 618, 682
- example of, 620
- common down turn, 602, 604, 682
- complex top, 602, 616, 682
- example of, 619
- descending top, 602, 610, 612, 682
- example of, 613
- double top, 602, 612, 614, 682
- example of, 615

- head and shoulders top, 602, 604, 682, 689
- quadruple top, 612, 614
- triangular top, 602, 682
 - example of, 608
- triple top, 612, 614
- element of volume indicating, 638
- example of, 678
- signs of, 677
- Dividend
 - rate, 356
 - on stock dividends, 355
 - rates, as quoted in newspapers, 447
 - use of par-value in determining, 315
 - vs. earnings, in determining value of stock, 411
 - yield, 411, 412
 - as factor in investment buying, 411
 - (see also Yield; Dividends)
- Dividends, 346-371
 - advantages of stock dividends, 358
 - as affected by profits, 356
 - as factor in margin trading, 412
 - cash payment, 347
 - change of ownership in relation to, 352
 - cumulative
 - on preferred stock, 316
 - ex-dividend, 176, 350
 - and net change, 448
 - date, 351
 - deferred by stock exchanges, 371
 - in relation to market value of stock, 353
 - stock exchange rulings on, 371
 - extra stock, 356
 - importance of date of payment, 351
 - importance of, from trading standpoint, 411
 - influence on market value of common stock, 352
 - in limited orders, 260
 - in liquidating companies, 400
 - in relation to corporation earnings, 396
 - in relation to margin trading, 358
 - in scrip, 360
 - insecurity of, as factor in high yields, 418
 - insecurity of high yield
 - example, 419
 - market fluctuations affecting, 363
 - no interest on, 276
 - non-cumulative preferred stock, 317
 - on common stock
 - misunderstanding regarding, 347
 - on cumulative preferred stock, 316
 - on participating preferred stock, 318
 - on preferred stock, 314
 - on short stocks, 176, 268
 - on stock, 258
 - forms of, 368
 - partly extra, 447
 - payable in stock, 356
 - payments as affected by first sale on ex-dividend date, 354
 - percentage profit safely paid as, 408
 - percentage return on investment, 408
 - preferred stock, 347
 - proper attitude toward, 412
 - record date for payment of, 351
 - regular
 - payment in combination cash and stock, 355
 - regular extra, 356
 - right to subscribe in lieu of cash, 347
 - stock, 347
 - advantages from corporation standpoint, 359, 360, 361
 - as factor in reducing common value, 348
 - cash value of, dependent on market fluctuation, 363
 - disadvantages of, 361, 362
 - effect on market value of common stock, 357
 - effect on surplus earnings and balance sheet, 356
 - extra, 355, 356
 - in relation to margin trading, 358
 - regular, 355
 - vs. cash, 361, 362
- Double bottom, 602
 - example of, 612, 615
- Double head and shoulders movement, 616
 - example of, 617
- Double stop, 496
- Double top, 602, 612, 614, 682
 - example of, 615
- Downward move
 - of cycle, 661
- Downward swings in market, 660
- Dow-Jones, 430
 - bond index chart, 694, 695

- chart of industrial stock issues, 677, 679
- market index, 457
- Drawings
 - bond, 308
- Du Pont de Nemours*
 - book value of stock, 393
 - chart of common stock, 654, 655
- Earning statements
 - before depreciation and depletion, 400
 - before taxes, 401
 - depreciation as part of (*see* Depreciation)
 - importance of, in stock analysis, 393, 394, 397
 - make-up of, 395
 - sample of, 394
 - unfavorable reasons for not issuing, 398
 - when issued, 395, 397
- Earnings
 - as affecting value of stock, 392
 - as check on intangible assets, 385
 - corporation (*see* Corporation earnings)
 - decline in stock as reflecting decline in, 417
 - earnings per share, how calculated, 399
 - in relation to book value of stock, 405
 - in relation to price of stock, 405, 406, 407
 - price-earnings ratio, 405, 406, 407
 - vs. balance sheet items in stock analysis, 392
 - vs. dividends in determining value of stock, 411
 - (*see also* Earning statements)
- Easy money (*see* Money)
- Economic service of the pool, 571
- Edwards, George W.*, 310
- Electric Auto-Lite*, 382
- Emery, H. C.*, on investment, 16
- Endorsed in blank, 333, 334
- Endorsed in full, 333
- England* (*see* *Great Britain*)
- Equipment bonds, 307
- Equities, 411 (*see also* Balance sheet)
- Equity, 305, 387, 389
 - reserves as part of, 390
- Escrow
 - stock in escrow, 340
- "*Evening up*," 526
- Exchange of comparisons, 89, 94, 98
- Exchange tickets, 98
 - for ex-stocks, 133
- Exchanges (*see* Stock exchanges)
- Ex-Clearing House, 87, 94
- Ex-clearing stocks
 - delivery of, 132
- Ex-dividend, 176, 350
 - and net change, 448
 - in relation to limited orders, 260
 - on stock dividends, 357
 - significance of, 354
 - (*see also* Dividends)
- Ex-dividend date, 351
 - deferred by stock exchange, 371
 - market price in relation to, 353
 - stock exchange rulings on, 371
- Execution of orders (*see* Order, execution of)
- Exhaustion gap (*see* Gap)
- Ex-issues
 - contingent lists for, 134
- Ex-rights, 368
- "*Ex-stocks*"
 - exchange tickets for, 133
- "*Ex-w*," 449
- Ex-warrants*, 325, 449
- False move, 529, 532, 537, 702
 - as affecting long-swing investor, 705
 - as indication of pool manipulation, 644
 - defense against, 645
 - definition of, 644
 - example of, 607, 608, 633, 637
 - importance of closing prices in, 646
- False starts, 497, 689, 702
 - as affecting short-swing trader, 705
 - defense against, 705
- Federal Reserve Bank of New York*
 - advance in rediscount rate of 1929, 686
 - brokers' loan compilation, 470
 - market index, 457
 - rediscount rate, 474, 476
 - stock market index, 674
- Federal Reserve Banks*, 219
 - discount rate
 - effect on opening prices, 488
 - rediscount rates, 474, 519
 - definition of, 476
 - relation of call money rate to, 674

- (*see also Federal Reserve Board; Federal Reserve system*)
- Federal Reserve Board*
 - Regulation of credit, 472
- Federal Reserve system*
 - as reservoir of credit, 476
 - official bank rate as affecting general interest rate, 476
- Federal taxes
 - on sale of stocks, 284
- Feeding out stock, 525
- Final receipt, 120
- "*Financial and Business Forecasting*" (Hickernell), 661
- Financial page of newspapers (description), 446
- Financial periodicals as sources of market information, 434
- Financial publications as sources of information, 428
- Financial statements
 - as form of publicity, 420
- Financial World*, 434, 444
- Financing
 - by banks, 583
- First mortgage bonds, 305
- First price, 447
- Fixed assets, 384, 399
- Fixed investment trust, 671
- "*Flat*" (*see "Seller 7 days flat"*)
- Flat price
 - bond, 312
 - stock, 270
- Floating bond issues, 307
- Floating supply, 497, 581
- Floor, description of, 30 (*see also New York Stock Exchange*)
- Floor buy slip
 - sample of, 199
- Floor purchase report slip
 - sample of, 201
- Floor sales report slip
 - sample of, 70, 201
- Floor sales slip
 - sample of, 70, 199
- Floor trader (*see Trader*)
- Fluctuation of market (*see Market movements; Prices*)
- Following the crowd, 516, 517
- Forbes Magazine*, 434, 444
- Forced liquidation (*see Liquidation*)
- Forced selling (*see Selling*)
- Ford Motor Company of Canada, Ltd.*, 535
- voting trust agreement of, 339
- Forecasting, 674
 - business future, 673
 - extent of panic of 1929, 690
 - general reaction by technical signals, 689
 - use of cycles in, 663
 - (*see also Analysis of stock; Charts*)
- Foreign liquidation (*see Liquidation*)
- Formations (*see Chart formations*)
- Formula system vs. progressive stop, 541
- Founders stock, 321
- Fraudulent advertising, 445
- Free lance broker (*see Brokers, two-dollar*)
- Frozen inventory, 216
- Full lot, 196
- Full-lot orders (*see Orders, full-lot*)
- Fundamental conditions
 - relation to cycles, 661
- Fundamental factors in stock market (*see Stock market*)
- Fundamental situation in 1929, 685
- Funded debt, 308
- Gambler, definition of, 20
- Gambling, 20-22
 - vs. speculation, 20
- Gap
 - break-away, 651, 653
 - chart examples of, 654, 655
 - common, 657
 - exhaustion, 652, 653, 684
 - intermediate, 653
 - trading, 651, 689
 - types of, 653, 657
 - (*see also Charts*)
- Gaps
 - in general market, 684
- General Asphalt*, chart of common stock, 612, 615
- General demand loan agreement, 226
- General foundation reserves, 390
- General market (*see Stock Market*)
- General market averages, 680
- General Motors Corporation*, 454
 - balance sheet, 388
 - common stock (chart), 610, 611, 612, 613
- General Railway Signal*
 - chart of common stock, 637
- General reaction, forecasting by technical signals, 689

- General trend, 458
 Give-up order (*see* Order, give-up)
 "Giving a name," 112 (*see also* Clearing House)
 "Giving notice" in terminating demand loans, 240
 Going assets, 386
 Gold bonds, 306
 Gold Medal flour, 384
 good-will advertising, 384
 Good delivery, 81, 173, 332, 333, 336
 Good till cancelled, 56
 Good today only, 57, 69
 Good-will, 384, 385
 advertising as factor in, 384
 as shown on corporation balance sheets, 385
 company earnings in relation to, 385
 valuation of, 385
 Goodyear Tire and Rubber Company, 316
 chart of common stock, 628, 629
 Graphic Market Record, 600
 Great Britain
 advance in rediscount rate in 1929, 687
 British investment trusts, 671
 British stock market history, 701-702
 Hatry failure, 687
 Stock market history, 701, 702
 Group movements, 516
 "G.T.C.," 56 (*see also* Order)
 Guaranteed options, 509
 "Gunning for stop-loss orders," 537
- H**atry failure, 687
 Head and shoulders bottom, 602, 682
 Head and shoulders movement (*see* Double head and shoulders movement; Charts)
 Head and shoulders top, 602, 604, 682, 689
 Hedging
 use of options in, 510
 Hershey Chocolate Corporation
 cumulative preferred stock, 328
 Hickernell, Warren F.
 on "Law of Loanable Funds," 661
 Hidden assets, 391
 as means of tax evasion, 391
 Holding stock for the dividend, 354
 Holidays
 effect on stock movements, 525
- Human element in market trading, 668
 (*see also* Psychology)
 Hudson and Manhattan Railway Company, 452
- I**magination as an element in stock movements, 423
 In escrow, 340
 Inactive issues, 29
 Inactive list, 212
 Inactive post, 213
 Inactive stocks (*see* Stocks)
 Indexes
 brokers' loan ratio index, 474
 credit indexes, 468
 Dow-Jones, bond prices, 694
 Dow-Jones industrial stock charts, 679
 market indexes (*see* Market indexes)
 of current business (*see* Business indexes)
 price-earnings ratio, 414
 stock, 60-year, 674
 use in market analysis, 672
 Industrial activity
 compared with stock price movements, 463
 Industrial Stock Index
 Dow-Jones chart, 679
 Inflation
 fallacy of, 416
 South Sea Bubble as example of, 701, 702
 (*see also* Stock, inflation of)
 Information (*see* Sources of)
 Initial sale, 490
 on abnormal days, 489
 Insecurity of dividends, 418
 example of, 419
 Inside interests, 583
 Insiders, 515, 516, 519, 521, 522, 568
 Activities of (*see* Pools)
 Installment accumulation (*see* Scale buying)
 Intangible assets, 384, 385 (*see also* Assets)
 Interborough Rapid Transit Co., 22
 Interest
 accrued, as item on balance sheet, 386
 accumulated, 312
 entries on brokerage statements, 272-273, 274
 on bonds, 311, 312, 452

- on debit balances, 158
- on small items, 276
- rates, 277, 674
 - as affected by bank rate, 476
 - as clue to stock market movements, 676
 - bank rate vs. open market rate, 476
 - correlation of, to long-swing movement, 674
 - effect on stock prices, 674
 - lag in relation to stock movement, 675
 - on credits, 273
 - on individual transactions, 277
 - on loans, 219, 238
 - received, 676
 - (see also Call money, rate; Time money, rate)
- ruling rate for demand loans, 239
- Interest account, 272, 273, 274, 275, 276
- Interim statements, 397
- Intermediate reaction, 531, 467
 - degree of strength in, 564
 - in bull market, 529
 - normal extent of, 562
- Intermediate reversal formations, 636
- Intermediate symmetrical triangle
 - example of, 628, 629, 639
- Intermediate trend lines
 - example of, 651
- Intermediate triangles, 632
- International Cement Corporation*
 - convertible bonds, 325
- International Match Corporation*, 318
- International Mercantile Marine* re-capitalization plan, 316
- Inventory
 - in analysis of balance sheet, 387
- Investment
 - and speculation, difference between, 511
 - and stock trading, difference between, 511
 - bonds vs. stocks as form of, 313
 - dividend yield important factor in, 411
 - long-pull, 669
 - influence of ready market in, 420
 - new invention industries and, 375
 - time to buy, 669
 - vs. long-swing, 667
 - long-swing vs. long-pull, 667
 - long-term, 660
 - percentage dividend return on, 408
 - profits in, as studied by *Sloan*, 664
 - ready market as factor in, 420
 - services (see Sources of information)
 - vs. speculation, 16, 17, 18, 20
- Investment banker
 - economic function of, 14
- Investment Research Bureau*, 438
- Investment trusts, 669
 - analyzing of, 670
 - dangers of, 670
 - types of, 671
- Investor
 - long-pull, 164, 667, 669, 698
 - long-swing, 658, 663, 669, 671, 693
 - vs. trader, 512, 658
- Journal of Commerce*, 431
- Judge Magazine*, 444
- Junior bond, 305, 306 (see also Bonds)
- Kennecott Copper*, 514
- Kirshman, J. E.*, on investments, 16
- Lag, 675
 - normal, 676
- Last price, 447
- Late-day trading movement, 527
- Law
 - of cycles, 663
 - of loanable funds, 661
- Leadership
 - business leaders, 377
- Lessons
 - of 1929 Panic, 691
- "Let profits run," 537
- Liabilities
 - as shown on company balance sheet, 386
 - current liabilities, 386
- Limit price, 189
- Limitations
 - of cycle theory, 662
- Limited liability, 11
- Limited orders (see Order, limited)
- "Line" of stock, 160
- Liquid position, 387 (see also Working capital)
- Liquid assets, 384
- Liquidating companies and dividend payments, 400
- Liquidation
 - effect on stock market, 687
 - forced, 154

- foreign
 - its effect on stock market, 687
 - necessitous, 154
 - selling against the box, 706
- Listerine*, 384
- good-will advertising, 384
- Loan clearance (*see* Loans)
- Loan crowd, 174
- Loan envelope (*see* Loans)
- Loaning at a premium, 178
- Loaning flat, 177
- Loans
 - as items on balance sheets, 386
 - bonds as form of, 304, 305
 - "bootleg," 472
 - brokers', 214-244
 - effect on credit, 472
 - as affected by increase in listings, 473
 - as factors in stock market analysis, 473
 - as indexes of credit situation, 469
 - compilations, 470
 - as factor in market analysis, 473
 - as indicators of speculation, 473
 - demand for, 216
 - ratio index, 474
 - Stock Clearing Corporation as agent, 232
 - syndicate, 216
 - to customers, 215
 - uses of, 470
 - (*see also* Loans, call, collateral, commercial, demand, time)
- bunching of securities, 220
- call, 139, 223
 - daily settlements, 224, 239
 - negotiating of, 228
 - origin of supply, 229
 - termination of, 240
- calling, 179
- clearance of, 139, 140, 237
- collateral, 217, 218
 - withdrawing of, 238
- commercial, 218
 - bankers' preference for, 219
- day, 83, 223
- demand, 217
 - agreement, 225 (*see also* Demand loan agreements)
 - average amount called daily, 241
 - example of, 232
 - interest rate, 238
 - paying off, 235
 - volume in force, 241
- general demand loan agreement, 225
 - sample, 226
- interest rates on, 219
- loan crowd, 174
- loan envelope, 220, 221, 227
 - substitutions, 238
- loaning at a premium, 178
- loaning flat, 177
- marginal trading
 - a form of, 147, 148
- mixed collateral, 227
- negotiations of
 - secured by odd-lot stock, 227
- new loan agreement, 233
- on undigested securities, 216
- premiums, 178
- rediscountable, 218
- regular loan collateral, 227
- renewal rate, 240
- return loan agreement, 236
- stock, on night clearing sheet, 108
- time, 217, 223, 224
 - foreclosing, 222
 - negotiation for, 221
 - to lenders of stock, 177
- transference of, 237
- types of, 83, 84
- unsecured day loans, 83
- withdrawing collateral, 238
 - during period of transfer, 141
- Loew's Incorporated*, 328
- Logarithmic vs. Arithmetic Scales (*see* Charts)
- London stock exchanges
 - settlement days in, 85
 - term settlements, in, 85
- Long buying, 166
 - use of stop-loss order in, 538
- Long position
 - over holiday period, 525
 - over week-end, 525
- Long pull, 18, 164, 498
 - natural factors in market movements, 467
 - new invention industries and, 375
- Long-pull buying
 - business indexes as guide in, 462
- Long-pull investor (*see* Investor)
- Long-pull investment (*see* Investment)
- Long-pull method
 - dangers of, 667, 668, 698

- Long swing
 - profits in, 664
- Long-swing campaigns
 - installment accumulation, 705
 - scale buying as protection in, 705
- Long-swing commitment (*see* Commitment)
- Long-swing investment (*see* Investment)
- Long-swing investor (*see* Investor)
- Long-swing movements, 658-692
- Long-swing operator (*see* Operator)
- Long-swing stock movement
 - correlation of business and, 672
- Long-swing trading
 - as an ideal, 671
- Long-term bond
 - maturity of, 309
- Long-term movement, 467
- Long-term swing
 - public psychology as factor in, 479
 - public savings as a factor in, 478
- Los Angeles Curb Exchange*, 294
- Los Angeles Stock Exchange*, 294
- Loss, paper (*see* Paper loss)
- Losses
 - limiting, 537
 - by stop-loss orders, 540, 550
- "Low," 447
- Lucky Strike Cigarettes*, 384
 - good-will advertising, 384
- Magazine of Business*, 434
- Magazine of Wall Street*, 434
- Magazines (*see* Periodicals)
- Major bear movement (*see* Market movements)
- Major bull movement (*see* Market movements)
- Major reversal, 694
- Management as factor in Company's business, 376
- Management investment trust, 671 (*see also* Investment trusts)
- Management of pool (*see* Pools)
- Management options on stocks, 321
- Management stocks, 321
- Manager (*see* Pool)
- Manipulation (*see* Pool)
- Margin, 180
 - as affected by market value, 155
 - average, 152
 - calculation of, 152
 - explanation of term, 151
 - of reserves necessary, 408
 - on low priced stocks, 405
- Margin account, 499, 500
- Margin buying, dividend payments as factor in, 412 (*see also* Marginal trading)
- Margin clerk, 60
- Marginal trading, 143-161
 - as form of loan, 147, 148
 - as affected by panics, 154
 - average margin required, 152
 - brokers' margin, 220
 - broker's services in, 148
 - calculating margin on short sale, 181
 - calculating of margin, 152
 - compared with property mortgages, 145
 - completing the transaction, 158
 - convenience of, 149
 - dangers of, 146
 - economic justification for, 147
 - example of, 150
 - in relation to forced liquidation, 154
 - in Stock Panic of 1929, 154
 - insufficient margin, 182
 - interest on debit balances, 158
 - margin as affected by market value, 155
 - margin requirements on short sale, 180
 - paper profits, effect of, 156
 - profits in, 159
 - pyramiding, 157
 - risk involved, 160
 - selling out, 153
 - services of brokers in, 148
 - stock dividends in relation to, 358
 - volume of, 215
 - vs. outright purchase, 159
- Market (*see* Stock market)
- Market ability, testing without risk, 545
- Market advance (*see* Chart formations)
- Market advisory services, 434
 - high grade, 437
 - list of, 438
 - responsibility for recommendations, 438, 439
 - true test of, 436
- Market analysis, 406, 524, 672
 - aim of, 460
 - analysts, 406

- brokers' loan compilations in, 472, 473
- brokers' loan ratio index, 474
- business indexes in, 461
- correlation of business and long-swing stock movements, 672
- general, importance of charts in, 677
- price-earnings ratio indexes, 414 (*see also* Charts; Market movements)
- Market breaks in bull market, 702
- Market indexes, 414, 456, 674, 694
 - Dow-Jones*, 457
 - Federal Reserve Bank of N. Y.*, 457
 - New York Times*, 457
 - New York Tribune*, 457
 - Standard Statistics*, 457
 - Wall Street Journal*, 457
- Market leaders, 526
- Market movements, 454, 456, 457, 526, 527, 561, 565
 - as affected by changes in bank rates, 474, 476
 - as affected by savings deposits, 478
 - bear (*see* Bear market)
 - before holiday, 525
 - bull (*see* Bull market)
 - consonance of individual movements, 458
 - corporation profits as factor in, 460
 - correlation of business and long-swing, 672
 - correlation of interest rates with, 674
 - cycles (*see* Cycles)
 - false moves (*see* False move)
 - fluctuations
 - affecting dividends in stock, 363
 - forecasting of, 461
 - fundamental vs. technical factors, 558
 - general vs. individual stock movement, 455
 - in relation to rediscount rate, 519
 - interest rates as forecast of reversal in, 675
 - lag between interest rate and, 675
 - long-term, 467
 - major formations indicating (*see* Charts)
 - major
 - indicated by break-away gap, 653
 - use of exhaustion gap in, 653
 - major bear, 530
 - major bull, 529
 - natural factors in, 460, 467
 - observation of, 524
 - public psychology as factor in, 478-481, 702
 - reversal (*see* Reversal)
 - secondary reaction, 530
 - shake outs (*see* False move)
 - stimulus for, 672
 - supply and demand as factor in, 459
 - technical factors in, 460, 467
 - credit, 468
 - rediscount rates, 474
 - technical position as indicated by brokers' loan ratio index, 474
 - trends in
 - week-end profit-taking, 525
 - window dressing, 524
 - types of, 460
 - use of, in forecasting, 663
 - window dressing, 524, 527 (*see also* Market indexes; Long pull; Long swing; Long-term swing)
- Market operator
 - classes of, 15
 - definition of, 13
 - economic value of, 15
- Market order (*see* Order, market)
- Market position, reversing by stops, 644
- Market price (*see* Price)
- Market profit (*see* Profit)
- Market psychology (*see* Psychology)
- Market quotations (*see* Market reporting; Sources of information)
- Market reporting, 251
 - abbreviations used in reporting
 - bonds, 450
 - cash trades, 449
 - central quotation system, 252
 - ex-dividend and net change, 448
 - new high speed ticker, 75, 76
 - New York Quotation Company*, 73
 - outside exchanges reported in N. Y. papers, 450, 452
 - "quotes," 252
 - stock board, 42
 - stocks with warrants, 449
 - stocks without warrants, 449
 - the bond page, 450
 - ticker tape, 51
 - description of operation, 72
 - time element, 74
 - Western Union Telegraph Company*, 74 (*see also* Sources)

- Market tips (*see* Tips)
- Market value of stock (*see* Stock)
- Marketing stock, 571
- Marking down, 626, 677 (*see also* Pool operation)
- Marking up, 572, 677 (*see also* Pool operation)
- Matched sale, 577
- Matched trade
 - example of, 578
- Maturity of bonds (*see* Bonds)
- McNeel's Financial Service*, 438
- Mean price, 664
- Meeker, J. Edward*, 33, 89, 190
- Membership (*see* N. Y. Stock Exchange, membership)
- Mental stop-loss order, 496
- Miami Copper*, chart on common stock, 622, 624, 625
- Mining industry
 - depletion charges in, 399, 400
 - liquidating companies, 400
- Missouri Pacific* convertible bonds, 323
- Mixed collateral, 227
- Money
 - easy, 675, 676 (*see also* Call money; Time money)
- Money broker, 221
- Money clearance, 91
- Money committee, 240, 241, 242
- Money crowd, 228
- Money desk, 229, 241
- Money market
 - tight, 243
- Money post, 239
- Moody's Investor's Service*, 433, 438
- Mopping up process, 497, 606
- Mortgage (*see* Bonds)
- Mother Lode Coalition Mines Company*, 400
- Motion picture stock (Talkies), 375
- Movement of stock (*see* Pools; Stock)
- Name paper**, 217
- National Better Business Bureau*, 444
 - headquarters, 445
- National City Bank of New York*
 - index of price-earnings ratio, 414
- Natural factor (*see* Long pull; Market movements)
- Necessitous liquidation, 154
- Negotiability of bonds (*see* Bonds)
- Net change, 447, 448
- Net income, 395, 396
- Net worth, 389
- "*Never sell a quiet market short*," 529
- "*New Era*" in stock trading, 407, 700, 701
- New invention industries, 375
- New invention stocks (*see* Stocks)
- New loan agreement, 233
- New loan application form, 230
- New York American*, 444
- New York Central*
 - chart of common stock, 604, 606, 607, 616, 617
 - example of ascending peak, 635
- New York, Chicago and St. Louis Railway*, 379, 452
- New York Curb Exchange*, 294
- New York Evening Post*, 431, 444
- New York Herald Tribune*, 431, 445
 - market index, 457
- New York News Bureau*, 430
- New York Produce Exchange*, 296
- New York Quotation Company*, 73
- New York State*
 - tax on sale of stock, 284
- New York Stock and Exchange Board*, 24, 26, 33
- New York Stock Clearing Corporation* (*see* Clearing House)
- New York Stock Exchange*
 - a model for other exchanges, 288
 - average daily trading, 39
 - average population during trading session, 72
 - brokers' loan compilation, 470
 - brokers' loan ratio index, 474
 - call boards, 30
 - central quotation system, 252
 - chronology of (*see* Appendix A), 713
 - Clearing House (*see* Clearing House)
 - closing, in relation to delivery, 87
 - description of, 28
 - development of, 24, 25, 26
 - the "Floor," description of, 30
 - history of, 23, 24, 26, 33
 - hours for trading, 86
 - inactive list, 212
 - market depreciation in 1929 Panic, 685
 - members, classes of, 33
 - members, types of, 40, 41
 - membership, 32
 - price of, 32

- money committee, 240, 241, 242
- odd-lot houses and, 191
- out-of-town members, 39
- percentage of transactions cleared in Night Branch, 141
- rule for comparison of trade, 89 (*see also* Rules)
- seats, 32, 33
- signalling the broker, 62
- trading posts, 28-29
- visiting the, 31
- volume of marginal trading, 215
- New York Sun*, 431
- New York Times*, 431
 - average of 50 stocks, 681
 - market index, 457
- News
 - as element in stock action, 515
 - as factor in price changes, 489
- News ticker, 430
- Newspapers
 - as sources of stock information, 428, 430, 431, 446
 - bond page, 449, 450
 - sample of, 452
 - financial page, 446
 - outside exchanges reported in N. Y. newspapers, 452
 - reporting of volume of sales, 449
 - selection of, for stock information, 432
- Niagara Hudson Power Corporation*, 342
- Nicknames of stocks, 49
 - list of, for popular stocks, 50
 - (*see also* Symbols)
- Night Clearing Branch, 93-112, 141
 - allotment sheet, 111
 - balance to prove, 107
 - bonds accepted for clearance, 94
 - buyer's receive ticket, 98
 - cash extensions on balances, 105
 - comparison exchange tickets, 95
 - comparison slips, 95
 - delivery price, 102
 - description of, 109
 - exchange of comparisons, 94, 98
 - "giving a name," 112
 - importance of, 106
 - night clearing sheet, 99, 108
 - sample of, 103
 - receive balance ticket, 111
 - regular or cleared stock, 93
 - résumé of activities, 113-114
 - stock loans on night clearing sheet, 108
- Night clearing sheet (*see* Night Clearing Branch)
- No-par value stock, 315
- Non-cumulative preferred stock (*see* Preferred stock)
- Non-member banks, 137
- Non-voting stocks (*see* Stock)
- "Note," 312
- Notice of redemption (*see* Redemption)
- Odd lot, 332
- Odd-lot dealer, 34, 188
 - as specialist, 188
 - economic value of, 192
 - growing position, 199
 - in history of Exchange, 190
 - market position of, 192
 - offsetting orders, 200
 - profits of, 196
 - protection for, 208
 - risks of, 202
 - (*see also* Odd-lot dealing; Odd-lot trading)
- Odd-lot dealing, 187-213
 - automatic fixing of odd-lot prices, 195
 - balancing the position, 194
 - danger of poor execution in, 204
 - determining prices on inactive stocks, 204
 - execution "away from the market," 197
 - growing position, 199
 - growth of, 190
 - minimum orders, 211
 - offsetting orders, 200
 - opening prices, importance of, 207
 - orders at opening or closing, 205
 - price factor in, 194
 - quarter stocks, 203
 - split opening, 205
 - volume of trading, 211
- Odd-lot houses, 191
 - balance of purchases, 194
 - efficiency of, 210
- Odd-lot orders (*see* Order, odd-lot)
- Odd-lot Prices (*see* Prices, odd-lot)
- Odd-lot trading, 528
 - commission rates, 284
 - example of, 198
 - execution away from the market, 197

- "fair opening," 206
- price factor in sale of stock, 194
- prices of inactive stocks, 204
- quarter stock, 203
- stop-loss orders in, 487
- Offsetting orders, 200
- Oil companies
 - depletion charges, 399
- On margin, explanation of term, 145
 - (see also Marginal trading)
- Open end mortgage bonds, 305
- Open orders, 483
- Opening
 - close, 529
 - spread, 529
- Opening balance, 280
- Opening of the market (see Stock market opening)
- Opening prices (see Prices, opening)
- Opening sale, 491
 - "bunched" orders at, 490
 - by specialist on abnormal days, 489
- Opening the account, 44 (see also Brokerage account)
- Opening transaction, as affecting dividends, 354
- Operator, long-swing
 - as affected by false moves, 705
 - calling the turns, 671
 - selling against the box, 706
- Option
 - as a legitimate hedge, 510
 - buyer or holder of, 504
 - buyer's option, 87
 - management options on stocks, 321
 - paying up, 509
 - prices (see Price, option)
 - seller, or maker of, 504
 - seller's option, 87
- Option trading (see Trading)
- Order
 - at the close, 205
 - at the opening, 205
 - bunched, 490
 - buy or cancel, 57
 - buying, 484, 485, 486
 - buying and selling, 490
 - as affected by wide opening, 491
 - in wash sales, 589
 - on abnormal days, 489
 - by mail, 254
 - cancellation of, 253
 - confirmation of, 256, 257, 260
 - coupled, 494
 - day order, 57
 - example of, 59
 - execution of
 - full lot, 488
 - full-lot stop, exception to, 489
 - odd-lot order stopped, 488
 - stop-loss orders at opening, 490
 - execution of order, effected by opening, 528, 529
 - following a typical transaction, 59-68
 - full-lot, 484
 - full-lot buying, 529
 - full-lot selling, 529
 - full-lot stop, exception to executing, 489
 - give-up order, 255
 - G. T. C., 483
 - good till cancelled, 56
 - limited, 55, 56, 189, 206, 483, 485
 - buying, 57, 529
 - cancelling, 483
 - confirmation of, 259
 - dividend reduction, 260
 - full-lot, 529
 - odd-lot, 206, 209
 - selling, 69, 529
 - market, 55, 56, 484
 - matched, 578
 - minimum, 211
 - odd-lot, 189, 206, 209, 528
 - offsetting orders, 200
 - on odd-lot stocks
 - at the opening, 205
 - at the close, 205
 - open, 483
 - reverse stop, 644
 - selling, 58, 69, 484, 486
 - automatic, 485
 - stop and limit, 493
 - advantage of, 494
 - stop, 483, 485, 537
 - advantages of, 538
 - as protection, 539
 - disadvantages of, 537
 - effect on stock market, 485, 486
 - efficacy of, 644
 - execution
 - at opening, 490
 - "gunning for," 537
 - in full-lot trading, 488
 - in odd-lot trading, 488
 - importance in short sales, 498
 - in odd-lot trading, 487
 - mental, 496

- relation to resistance levels and support points, 645
 - reversing market position with, 644
 - to protect short position, 496
 - use of, 486, 550
 - use of, in intermediate reactions, 564
 - use of, in short sales, 496
 - (*see also* Stop order)
- stop-loss (*see* Order, stop)
- stop orders to buy, 484
- stop orders to sell, 484
- stop vs. formula system, 541
- time limits on, 57
- transmission of, 51
- written form, 250 (*see also* Brokerage house, order forms)
- Order pads, description of, 53
- Otis Steel Co.*, 316
- Outright, 155
- Outside exchanges, 288-300
 - Associated Stock Exchanges*, 296
 - assurances of reputable listing, 297
 - Chicago Stock Exchange*, 292
 - development of, 289
 - economic value of, 290
 - how to list stocks on, 291
 - list of representative, 292
 - medium for smaller issues, 290
 - New York as model for, 288
 - Philadelphia Stock Exchange*, 294
 - San Francisco Stock Exchange*, 293
 - strict regulations of, 298
 - trading reported in New York papers, 452
- Outstanding capitalization, 321
- Outlook, 445
- Over-confidence, dangers of, 556
- Over-enthusiasm, dangers of, 556
- Over-the-counter, 453
- "*Overhanging the market*," 561
- Ownership certificates (*see* Stock certificates)
- Pages, 71
- Panic of 1929*, 154, 242, 406, 415, 416
 - as foretold by charts, 688
 - cause of, 687
 - final support level in, 691
 - forecast by technical signals, 689
 - forecasting, extent of, 690
 - fundamental situation in, 686
 - inflation preceding, 410
 - lessons of, 691
 - technical situation in, 688
 - volume of odd-lot trading, 211
- Paper loss, 545
- Paper profits (*see* Profits)
- Paper trading (*see* Trading)
- Participating preferred stock (*see* Preferred stock)
- Partly extra, 447
- Part ownership, 303
- Par value, 314, 386
 - of preferred stocks, 315
 - why set at 100, 413
- Passing dividends, 316
- Paying off demand loans, 235
- Pegged, 419
- Period settlements (*see* Clearing House)
- Periodicals
 - as sources of stock market information, 434
 - stock inquiry departments, 444
 - (*see also* Sources of information)
- Perpetual bonds, 309
- Per-share earnings, 407
 - in estimating price-earnings ratio, 407
- Personal analysis
 - as factor in determining stock prices, 403
- Pet stocks, boosting, 440
- Philadelphia Record*, 445
- Philadelphia Stock Exchange*, 294
 - first to adopt stock clearance, 89
- "*Plowing back*," 356
- "*Points away*," 510, 537
- Points of resistance, 584
- Points of support, 584
- Pool
 - bear
 - becoming bull pool, 576
 - manager of, 577
 - manipulation, indications of, 608
 - marking down, 608
 - marking up, 575
 - publicity stage, 575
 - stages of, 574
 - stock favorites of, 581
 - bull
 - banking operations in, 583
 - from bear, 576
 - manager, aim of, 581
 - stages of, 572
 - stock favorites of, 581
 - defined, 569

- economic service of, 571
- make-up of, 570
- managing of, 570
- uses of, 571
- Pool activities, 524
- Pool control, 422
- Pool favorites, 580
- Pool management, 570
 - importance of, 576
- Pool manager, 576
 - objective of, 579
 - questionable, 577
 - use of charts by, 598
- Pool manipulation, 537
 - as indicated by triangle or coil, 622
 - as indicated by shake-out, 644
 - use of charts in detecting, 601
 - (*see also* Pool; Pool operation)
- Pool operation, 569
 - accumulation (*see* Accumulation)
 - analyzing, 579
 - as indicated by triangle or coil charts, 604
 - complications of, 580
 - detection of, 580
 - distribution in (*see* Distribution)
 - principles in study of, 580
 - stages of, 572
 - (*see also* Pool; Pool manipulation)
- Pools
 - abuses by, 571
 - aim of, 570
 - as factors in market psychology, 480
 - bear, 572
 - accumulation at close of, 575
 - bull, 573
 - classes of, 572
 - engineering false move, 646
 - insiders of (*see* Insiders)
 - origin of, 570
 - reasons for failure of, 576
 - underlying principles of, 569
- Pool stocks (*see* Stocks, pool)
- Poor execution, 490, 492, 494
- Poor's (market service), 433
- Post
 - inactive, 213
- Posts, 62 (*see also* Trading posts)
- Postum
 - good-will advertising, 384
- Pratt, S. S., on investment, 16
- Preferred stock, 3, 314
 - as item on corporation balance sheet, 386
 - convertible
 - conversion price, 327, 328
 - notice of redemption, 330
 - redemption, 330
 - rights, 327
 - cumulative
 - dividends on, 316
 - definition of, 4
 - dividend on, 314, 347
 - non-cumulative, 317
 - participating, 318
 - call price on, 319
 - substitution of Class A common for, 320
 - voting privilege, 341
 - vs. Class A Common, 320
 - vs. common, 319
 - with warrants, 328
- Premiums (*see* Loans)
- Price, Theodore
 - on speculation vs. gambling, 20
- Price
 - a limiting factor in declines, 495
 - and stop-loss orders, 538
 - as affected by support levels, 585
 - as an element in stock analysis, 402
 - asked, 448
 - average mean, 664
 - bid and asked, 54
 - call price on preferred stock, 319
 - conversion price
 - of convertible bonds, 323, 324
 - on warrant bonds, 327
 - delivery price, 106
 - "flat," 270
 - "flat," for bonds, 312
 - in relation to earnings on stocks, 405, 406, 407
 - "limit," 189
 - movements (*see* Market movements)
 - odd-lot stock, 449
 - in stop-loss orders, 487
 - of demand credit, 238
 - of rights, 369
 - as affected by expiration date, 370
 - of stock, as changed by matched and wash sales, 577
 - of stop and limit order, 493
 - option
 - for straddles and spreads, 507
 - price-earnings ratio, 405, 406, 407
 - stock
 - above book value, 405

- high, 447
 - last, 447
 - low, 447
 - opening, 447
 - stop, 484
 - support level, 531
 - trends, 477
- (*see also* Conversion price)
- Price changes
 - at opening of market, 489
 - in charts, 595
 - news as factor in, 488
- Price-earnings ratio, 405, 406, 407
 - and bear market, 416
 - and bull market, 416
 - basis of, 407
 - indexes, 414
 - ratio of, 10, 407
 - "*ten times earnings*," 407
 - theories regarding, 407, 409
- Price element in stock clearing, 101
- Price fluctuation
 - as studied by Sloan, 664
 - big trader's part in, 515
 - in market, 661 (*see also* Market movements, fluctuations)
- Prices, 449
 - affected by week-end, 525
 - bid, 448
 - bond, as a stock index, 694
 - closing, 527, 567
 - importance in chart system, 645
 - importance in shake-out, 646
 - importance of, 567
 - indicating on charts, 594
 - significance of, 526
 - depression before holiday period, 525
 - effect of
 - averaging operations, 501, 502
 - evening up, 526
 - interest rates on, 674
 - stop orders on, 485, 486
 - window dressing, 526
 - general trend of, 458
 - in odd-lot trading, 528
 - in relation to Federal Reserve rate, 519
 - indicating, on charts, 593, 594
 - net change, 447
 - odd-lot
 - automatic fixing of, 195
 - on inactive stocks, 204
 - sales, 194
 - on abnormal days, 489
 - opening, 447, 489, 491
 - effect of Federal Reserve rate on, 488
 - importance in odd-lot dealing, 207
 - indicating, on charts, 594
 - "*split opening*," 205
 - stock, 304
 - as reflecting trend in general business, 462
 - movements of, compared with industrial activity, 672 (*see also* Market movements)
- Prime name paper, 217
- Prior claim, 305
 - bonds vs. stocks, 305
- Private banking houses, 583
- Private interests, 583
- Produce exchange (*see New York Produce Exchange*)
- Production
 - and consumption as factors in business cycle, 466
 - as factor in business trends, 465
- Profit and loss
 - limits of, 544
- Profit and loss surplus, 386, 389
 - in relation to dividend payment, 396
- Profit-sharing bonds, 307
- Profits
 - accrued
 - as affecting value of common stock, 411
 - as affecting dividends, 356
 - corporation
 - as affecting value of common stock, 348
 - danger of setting definite goal for, 555
 - how odd-lot dealer makes his, 196
 - in a bear market, 185
 - in arbitrage, 534
 - in long-pull investment (Sloan), 664
 - in market (by insiders), 521
 - limit to be expected, 540
 - long-pull, 668
 - margin trading vs. outright purchase, 159
 - of trader, 512
 - on average stocks, 404
 - paper, 156, 499, 500, 545
 - percentage paid as dividends, 408
 - protecting with progressive stop, 540

- taking of, by big traders, 515
- taxes on, as shown in corporation statements, 401
- use of, in selling short, 501
- use of stop orders in, 540 (*see also* Corporation earnings)
- Prosperity
 - as element in business cycle, 661
 - as stage of stock market cycle, 677
- Protecting profits with progressive stop, 540
- "*Proving the balance*," 265
- Proxy
 - voting by, 342, 344
- Psychological dangers in trading, 557
- Psychological handicap of long-pull investor, 669
- Psychological state of trader, 553
- Psychological trading rules (*see* Rules)
- Psychological upset, prescription for, 554
- Psychology
 - as factor in market movements, 478
 - as factor in trading, 549, 552
 - as power in market, 700
 - in market movements, 702
 - market, 478, 480, 519
 - public
 - as factor in cycles, 480
- "*Public*," 523
 - in stock market, 568
 - reasons for losses in stock market, 698
- Public enthusiasm as element in bull market, 696
- Public psychology (*see also* Psychology, market)
- Public utility companies, capitalization, 378
- Public utility stock vs. other, 373
- Publicity
 - as factor in stock analysis, 420
 - importance of, in corporation statements, 393
- Publicity stage (*see* Pool)
- Pull vs. swing, 659
- Put*, 504, 505
- Pyramiding, 157
 - in short selling, 184
 - on paper profits, 499
- Quarter stocks, 203
- Quotations (*see* Market reporting; Ticker tape)
- Quote slips, 55, 271 (*see also* Brokerage houses, order forms used)
- Quotes (*see* Market reporting)
- Radio Corporation of America*, 562
 - chart, 649
- Radio stock, 375, 619
- Railroad companies
 - capitalization, 378
- Rates (*see* Call money; Depreciation; Depletion; Interest; Time money)
- Ratio index (*see* Loans, brokers')
- Ratio of ten (*see* Price-earnings ratio)
- Reaction
 - intermediate, 694
- Ready market, 25, 420
- Recapitalization, 316
- Receive balance ticket
 - sample of, 111
- Receive ticket, 97
- Record date, 351
 - stock exchange ruling on, 371
 - (*see also* Ex-dividend date)
- Recovery in stock market, 530, 531
- Redeemable bonds, 309
- Redemption
 - notice of, on convertible preferred stock, 330
 - notice of, on preferred stock with warrants attached, 330
 - notice on warrant bonds, 327
 - of warrant bonds prior to maturity, 327
- Rediscount rate, 474, 674
 - advance in, 520
 - as index of credit, 477
 - definition of, 476
 - Federal Reserve Bank*, 519, 686
 - raised by Great Britain, 687
 - (*see also* *Federal Reserve Bank*)
- Rediscounting (*see* Loans)
- Refunding bond, 306
- Registered bond, 311
- Registrar of stock, 332
- Regular extra dividends, 356
- Regular loan collateral, 227
- Regular stocks, 93, 94
- Regular way of stock trading, 86, 450
- Renewal rate, 239
- Report forms, 255
- Reporting (*see* Market reporting)
- Reporting stock sales, 50-51
- Reporting the transaction, 66

- Reserves
 as items on balance sheet, 390
 capital, 390
 for depreciation, 390
 general foundation, 390
 margin of, in corporations, 408, 409
- Resistance level, 531, 532, 542, 543
 as established by ascending triangle, 632
 broken, 643
 charting of, 640
 degree of recovery from, 588, 589
 example of, 642
 in 1929 panic, 690
 natural reasons for, 565
 placing of stop orders, 645
- Retirement of bonds, 307-308
- Return loan agreement, 236
- Return receipts, 282
- Reversal
 extent of, 562
 forecast by irregularity on high volume, 637
 intermediate, as indicated by chart formations, 636
 in bear market, 702
- Reverse swing, 466
- Revival
 as applied to business cycle, 661
 as stage of stock market cycle, 677
- Right certificates, 335
- Rights, 335, 337, 346-371
 approximate value, 365
 calculating value of, 365
 ex-rights, 368
 exercise of (*see* Rights, selling of)
 expiration date of, 369, 370
 granting of, 364
 price of, 370
 selling of, 369, 370
 stock
 value, methods of calculating, 365
 to subscribe to stock, 335, 337, 347
 under voting trust agreement, 339
 value of, calculated by
 approximate method, 365
 exact method, 367
 familiar method, 366, 367
- Risk
 as an element in stock trading, 17
 in investment trust, 670
 in margin trading, 160
 methods for reducing, 536
 of the odd-lot dealer, 202
 of trader, 512
- Rolling stock, 307
- Room traders, 42-43
- Rules
 long-swing campaigns, 705
 psychological trading, 555, 556
 trading, 529, 537
 Wall Street, 529
- Ruling rate of interest, 239
- "Run in," 422
- "Run-up," 532
- "S," 275
- "S 7 F," 450
- "S-20," 87
- Sales
 matched, 577
 short (*see* Short sale; Short selling)
 volume of, 449
 wash, 577, 578
- Sales ticket, sample of, 97
- San Francisco Curb Exchange*, 294
- San Francisco Stock Exchange*, 293
- Savings bank deposits, as indicating relative buying power of public, 477
- Scale buying, as basis for long-swing campaigns, 705
- "Scalp," 653
- Schenectady Gazette*, 445
- Scribners*, 445
- Scrip*, 360
- Sears, Roebuck & Co.*
 dividends on common stock, 355
 earning statement, 394
- Seasonal industries, 374
 and dividend payment, 396
- Seasoning, 424
- Seats, 33
 on the Exchange, 32
- Second mortgage bonds, 305
- Secondary reaction, 530, 588
 chart example of, 589
 degree of, 589
 in major declines, 590
- Secular trend, 662
- Secured, as applied to bonds, 305
- Securities
 sources of information regarding, 427
 undigested, 216
 (*see also* Common stock; Preferred stock; Bonds)

- Security
 corporate (*see* Corporate security)
 for borrowed stock, 175
 of bonds, 305
 Security analysis (*see* Analysis of stock)
 Security capitalization, 378
 Security loans, 177 (*see also* Loans; Credit)
 Security market (*see* Stock market)
 Security market services (*see* Market advisory service)
 Security originating houses, 583
 "Security Speculation," 664
 Selecting the stock (*see* Stocks, selection of)
 Sell pads, sample of, 53
 "Seller 7 days flat," 450
 "Seller 30 flat," 452
 Seller's delivery ticket, sample of, 96
 Seller's options, 87
 Selling
 forced, 529
 stop orders to sell, 484
 "*Selling against the box*," 706
 example of, 707
 Selling order (*see* Order)
 Selling out, 153
 Selling points in down trend, 648
 Selling short (*see* Short selling)
 "Selling when the news is out," 515
 Senior securities, 331
 Serial bond issues, 308
 "Settled" stocks, 94
 Settlement periods (*see* Clearing House)
 Settlements (*see* Clearing House, settlements)
 Shake-out (*see* False moves)
 Shares, 331
 fractional, 360
 Short covering, effect on stock, 516
 Short interest, 422
 Short position
 balances, 278, 279
 over week-end, 525
 protected by stop-loss orders, 496
 Short-pull commitment (*see* Commitment)
 Short sale, 162-186
 danger of corner in, 497
 importance of stop-loss orders, 498
 Short selling, 162-186, 495
 against a long position, 706
 as distinguished from "*selling against the box*," 706
 averaging up, 501
 bonds, 451
 borrowing the stock, 172
 buying in the short customer, 182
 by bear pools, 581
 calling a loan, 179
 credit charges, 185
 dangers, 170
 definition of, 498
 dividends on short stocks, 176, 268
 example of successful sale, 183
 in a declining market, 185
 interest on short sales, 275
 loan crowd, 174
 loaning at a premium, 178
 loans to lenders, 177
 margin calculation, 181
 margin requirements, 180
 pyramiding, 184, 501
 selling, 171
 specific example of, 170
 stop-loss order as protection, 706
 use of credit in, 166
 use of stop-loss order in, 538
 Short swing, 558
 Short-swing trader (*see* Trader, short-swing)
 Short-swing trading (*see* Trading, short-swing)
 Short term, 309
 Short-term bond, maturity date of, 309
 Short-term trader (*see* Trader)
 Short-turn, 422
 Short-turn trading (*see* Trading)
 Signals
 continuation, 681
 of trend reversal, 681
 technical (1929 Panic), 689
 Simple confirmation, 260
 Sinking fund bonds, 308
 "Slate," 118
 Sloan, Lawrence H., on "*Security Speculation*," 664
 Sources of information, 427-453
 brokerage house market letter, 440
 financial periodicals, 434
 financial publications, 428
 importance of stock information bureaus, 442
 inquiry departments of magazines, newspapers, etc., 444

- inquiry departments, list of periodicals maintaining, 444
- market advisory services, 434
- National Better Business Bureau*, 445
- newspapers, 428, 430, 446
 - bond page, 452
 - selection of, 432
- news ticker, 430
 - agencies, 430
- official information, 429
- periodicals, financial, 434
 - maintaining special stock inquiry departments, 444
- separate departments for answering inquiries, 442
- statistical bureaus, 432
- statistical information bureaus, 428, 429
 - ticker bureau, 430
 - tipping services, 435
 - tipster sheet, 441
 - unofficial information, 429
- South Sea Bubble*, 701, 702
- Specialist, 29, 34, 188, 189
 - origin of, 12
 - stop order, handling of, 489
- Speculation
 - brokers' loan compilations as indicators of, 473
 - pool control of stock as factor in, 422
 - ready market as a factor in, 420
 - "*Security Speculation*," 664
- Speculation and investment, difference between, 511
- Speculation vs. gambling, 20
- Speculation vs. investment, 16-20
 - element of risk, 17
 - element of time, 18
- Speculator, 20
 - use of credit by, 144
 - (*see also* Speculation)
- Split opening, 205
- Spread, 54, 204, 504, 507, 653 (*see also* Gap)
- Standard Oil of New Jersey*, 382
- Standard Statistics Company, Inc.*, 433
 - market index, 457
 - price-earnings ratio index, 414
- Statistical bureaus, 432
 - Moody's*, 433
 - Poor's*, 433
 - Standard Statistics*, 433
- Statistical information bureaus, as sources of stock information, 428, 429
- Statistical study of five methods of stock trading, 664
- Stedman, E. C.*, 33
- Stock
 - action of, 516
 - advance in, 537, 561
 - agreements (*see* Agreements)
 - analysis (*see* Analysis of stock)
 - appreciation of, 376
 - attractiveness (*see* Analysis of stock)
 - borrowed stock, 172, 175
 - broker (*see* Brokers)
 - buying and selling (*see* Trading)
 - calculating book value of, 388
 - certificate (*see* Stock certificates)
 - clearing, 79, 90
 - advantages of, 84
 - example of, 82
 - explanation of, 82
 - history of, 88, 89, 90
 - price element in, 101
 - regular or cleared, 93
 - (*see also* Clearing House)
 - common (*see* Common stock)
 - control by voting trust certificates, 337, 340
 - decline in, reflecting company's earnings, 417
 - delivery, 79, 86, 87
 - central delivery, 123
 - direct, 136
 - depression-proof, 375
 - distribution, 359
 - dividends (*see* Dividends)
 - earnings
 - in relation to book value, 405
 - in relation to price, 405, 406, 407
 - effect of short covering on, 516
 - effect of stop-loss orders on, 485
 - ex-dividend, 350
 - ex-dividend date, first sale of the day, 354
 - ex-rights, 368
 - floating supply, 581
 - founders', 321
 - future prospects, 422
 - indexes (*see* Indexes)
 - in escrow, 340
 - inflation of, in 1929, 410, 416
 - influence of corporation management on, 376

- interest of banks in, 582
- management, 321
- market value of
 - and "ex-rights," 368
 - and stock dividend, 357
 - as affecting rights, 369
 - corporation earnings as basis of, 359
 - earnings vs. dividends as a guide to, 411
 - in relation to ex-dividend date, 353
 - supply and demand on ex-dividend date, 353
- movements (*see* Market movements)
- no-par value, 315
- non-voting, 341
- par value, 413
- pool control of, 422 (*see also* Pools)
- preferred stock (*see* Preferred stock)
- price, 404
 - as set by banking interests, 584
- price-earnings ratio, theories regarding, 407
- price movements, compared with industrial activity (*see* Prices, stock)
- prices
 - as affected by matched and wash sales, 577
 - bond prices as index of, 694
 - "*New Era*," 407
 - "spread," 54
 - (*see also* Prices)
- public utility vs. other, 373
- publicity as an element in attractiveness of, 420
- quotations of (*see* Market reporting)
- reaction after news is out, 515
- registration, 332
- reporting (*see* Market reporting)
- resistance level, 531
- rights (*see* Rights)
- sale
 - initial, on unusual days, 489
 - order, 58
 - reporting of, 50, 51 (*see* Market reporting)
 - volume of, 449
- seller's delivery ticket, 96
- selling
 - long-swing commitments at close of bull market, 705
 - on scale up in bull market, 705
 - shares, 331
 - size of stock issue, 381
 - split-up, 534
 - studying history of, 582
 - support level, 531
 - technical position, 422, 513
 - transaction, following a typical, 59-78
 - transfer agent, 332
 - transfer form, 333
 - types of, 313
 - valuation (*see* Analysis of stocks)
 - value of
 - as affected by size of issue, 381
 - example of, 382
 - as affecting rights, 369
 - voting, 345
 - voting privilege
 - importance of, 342
 - preferred stock, 341
 - voting proxy, 342, 344
 - with warrants, 449
 - without warrants, 449
 - yield, method of computing, 412 (*see also* Yield)
 - (*see also* Stocks)
- Stock boards
 - new automatic, 42
- Stock campaign
 - definition, 498
 - pyramiding, 499
- Stock certificates, 331, 332
 - as symbol of part ownership of physical property, 303
 - change in, 335
 - definition of, 27
 - endorsed in blank, 333, 334
 - endorsed in full, 333
 - good delivery, 81, 336
 - negotiability of, 80
 - record of ownership, 346
 - registration of, 336
 - temporary, 338
 - trust certificate, 338
- Stock charts (*see* Charts)
- Stock Clearing Corporation (*see* Clearing House)
- Stock corner, 497
- Stock Exchange, 10-38
 - credit, 143-161
 - definition of, 13, 28
 - economic function of, 14, 15
 - economic value of, 10
 - formation of, 12

- listing committee, substitution of certificates, 338
- listings, as affecting brokers' loans, 473
- modern development of, 11
- ready market of, 25
- rise of, 23
- rulings on ex-dividend dates, 371
(*see also* New York Stock Exchange)
- Stock exchanges
 - Associated Stock Exchanges*, 296
 - listing stock on, 291
 - outside (*see individual cities*; Outside exchanges)
 - strict regulations of, 298
- Stock index numbers (*see* Market indexes)
- Stock information (*see* Sources of information)
- Stock loans
 - on night clearing sheet, 108
(*see also* Loans; Night Clearing Branch, night clearing sheet)
- Stock market
 - action discounting in, 513
 - analysis (*see* Market analysis)
 - applying of chart formations to, 677
 - averages, 674, 680
 - classification of groups, 456
 - close-up of, 587
 - plate of, 533
 - credit situation in forecasting future course of, 674
 - cycle (*see* Cycle)
 - decline in, 165, 530, 531, 536
 - affected by bunched orders, 490
 - explanation of, 485 (*see also* Declines in market)
 - effect
 - of rediscount rate on, 520
 - of stop orders on, 485, 486
 - effect of
 - on business, 673
 - fluctuation (*see* Market movements)
 - fundamental factors in, 558
 - gaps in, 684
 - history
 - Great Britain, 701, 702
 - (*see also* New York Stock Exchange)
 - inflated, affected by other collapses, 687
 - opening
 - affecting execution of orders, 528, 529
 - and price changes, 488
 - executing stop order at, 490
 - on unusual days, 489
 - operations, important factors in, 693
 - pool operations (*see* Pools)
 - profits (*see* Profits)
 - psychology (*see* Psychology)
 - reactions
 - intermediate, 529
 - secondary, 530
 - ready market as influence in stock purchase, 420
 - recovery, 530, 531
 - rising yield in declining market, 417
 - support level, 532
 - technical position (*see* Technical position)
 - technical side of, 558-590
 - unexpected element, 521
 - upward springs, 660
 - use of stop-loss order in, 486
 - volume of sales
 - as reported in newspapers, 449
(*see also* Volume of trading)
- Stock market operation
 - aid of cyclical theory in, 663
 - arbitrage, example of, 534
- Stock market operator (*see* Market operator)
- Stock market page (*see* Financial page of newspapers)
- Stock market panic (*see* Panic of 1929)
- Stock market trader, 512 (*see also* Trader)
- Stock market trading (*see* Trading)
- "Stock overhanging the market," 566
- Stock ownership
 - definition of, 4, 5
 - fundamental principle of, 5, 7
 - limited liability, 11
 - in relation to date of dividend payment, 351
 - outright, 155
 - significance of, 4, 5
 - transfer of, 80
- Stock Panic of 1929* (*see* *Panic of 1929*)
- Stock purchase
 - bill of sale, 262
 - company's business as factor in, 373
 - corporation balance sheet as factor in, 377

- credit balance, 44
- customer's agreement, 45
- element of personal attitude, 19
- element of risk, 17
- element of time, 18
- following a typical transaction, 59, 68
- fundamental considerations, 372
- good till cancelled order, 56
- high yield as danger signal in, 417
- limited order, 55, 56
- market order, 55, 56
- most advantageous time for, 460
- opening the account, 44
- order pads, 53
- order, transmission of, 51
- price factor in, 46
- reporting the transaction, 66
- speculation vs. investment, 16-20
- speed of transaction, 66
- trading on tips, 21
- (*see also* Order; Stocks; Trading)
- Stock purchase warrant, 327
- Stock receipt from Clearing House, 129
- Stock split-up, 359
- Stock tape (*see* Ticker tape)
- Stock ticker, reporting by, 50, 51
- Stock traders (*see* Trader)
- Stock trading (*see* Trading)
- Stock Transfer Department, 138
- Stockholders of record, 351
- Stocks
 - action as influenced by news, 515
 - as "*productive physical property*," 4-10
 - asset value, 412
 - banks as sponsors of, 583
 - book value, 404, 405
 - buying and selling (*see* Trading)
 - distribution or accumulation for
 - long-swing campaign, 705
 - ex-dividend and net change, 448
 - ex-warrants, 449
 - favored by pools, 581
 - future prospects of
 - element of imagination in, 423
 - inactive, 29, 204
 - index numbers of (*see* Market indexes)
 - line of, 160
 - listing on exchange, 291
 - market leaders, 526
 - market value of, 405, 406, 411, 420
 - earnings vs. dividends in determining, 411
 - price-earnings ratio, 407
 - movement (*see* Market movements)
 - new invention, 423
 - normal course for, 424
 - when buying is justified, 415
 - nicknames, 49
 - list of, 50
 - odd-lot, orders for (*see* Odd-lot dealing)
 - over-boomed, 518
 - par value, 314
 - per cent. return on, 407
 - pool, 582, 600
 - preferred vs. common, 319
 - price above book value, 405
 - price movements, individual and general, 455
 - prices of, 304
 - prices, bid and asked, 54 (*see also* Prices)
 - profits on, 404
 - quarter stocks, 203
 - regular or cleared, 93
 - selection of, 47
 - sources of information, 427 (*see also* Sources of information)
 - symbols of, 47-49
 - taxation on sale of, 284
 - volume of sales, 449
 - vs. bonds
 - as investment, 313
 - as safe form of investment, 304-305
 - in capitalization, 378
 - (*see also* Common stock; Preferred stock; Stock)
- Stop and limit order (*see* Order)
- Stop-loss order (*see* Order; Stop order)
- Stop order
 - as protection in short sales "against the box," 707
 - as protection in short selling, 706
 - how it works, 484
 - to buy, 484
 - to sell, 484
 - (*see also* Order)
- Stop price, 484
- "*Stopping of stock*," 483
- Straddle, 504, 506
- Subscription rights (*see* Rights)
- Substitutions in loan envelope, 238
- Success, danger of, in trading, 556

- Supply and demand, 63, 523, 561, 568
 - artificial factors in, 568
 - as factor in business trends, 466
 - as factor on ex-dividend date, 353
 - as factor in market movements, 459
 - as factor in price changes, 489
 - bid and asked prices reflecting, 448
- Support, 530
- Support level, 531, 532, 565
 - broken, 641
 - in 1929 Panic, 690, 691
- Support levels
 - as established by descending triangle, 630
 - banking, 585
 - buying at, 542
 - charting of, 640
 - degree of recovery from, 589
 - in chart illustration, 587
 - natural reasons for, 565
- Support points
 - reason for stop order, 645
 - trading on, 641
- Surplus, 387
 - profit and loss, 389 (*see also* Profit and loss surplus)
- Surplus worth, 387
- Suspension of preferred dividends, 316
- Swedish Match Co.*, 318
- Swing vs. pull, 659
- Swings, cyclical in general market, 660
- Switching stop, 496
- Symbols for stocks, 47, 49 (*see also* Abbreviations; Nicknames)
- Symmetrical triangle, 628, 632 (*see also* Intermediate symmetrical triangle)
- Syndicate, 216, 583
- "Take losses but let profits run,"* 536
- Tangible assets, 384
- Tax-free bonds, 310
- Taxes
 - accrued, as item on balance sheet, 386
 - corporation reserves for, 401
 - evasion of, by means of hidden assets, 392
 - on sale of stocks, 284
- Technical analysis
 - charts as aid to, 591
 - (*see also* Analysis of stock)
- Technical factors
 - 1929 Panic, 690
 - credit situation in, 674
 - in trading (banking operations), 582
- Technical position, 422, 474, 513, 677
 - evidences of weakening in bull market, 694
- Technical side of market, 558-590
- Technical signs, 689
- Technical situation
 - in Panic of 1929, 688
- Technical study
 - of market charts, 560
- Technical trend
 - example of, 651
 - explanation of, 647
- Television, 375
- Temporary stock certificate, 338
 - registration, 338
 - Stock Exchange Listing Committee, 338
- Ten-share unit stocks, 212
- Term settlements, 85, 86
- Three-way central delivery ticket
 - sample of, 126
- Thrift (*see* Savings bank deposits)
- Ticker
 - bond market ticker, 75, 450
 - capacity per minute, 74, 75
 - delays in, 74, 75
 - description of operation, 72
 - new high-speed, 75, 76
 - time for reporting transaction, 74
 - Trans-lux, 43
- Ticker bureau, 430
- Ticker operators, 72
- Ticker symbols (*see* Stocks; Symbols)
- Ticker tape, 51
 - section of, 52
 - watching the tape for record of specific sale, 77
- Tight money market, 243
- Tillman Survey*, 438
- Time element
 - in distribution triangle, 626
 - in general market, 680
 - in pull, 659
 - in stock market trading, 18, 66, 511, 512
 - in swing, 659
 - in trading and investing, 513
 - in triangle formation, 622
- Time limits
 - on odd-lot orders, 209
- Time loan agreement, 221
- Time loans (*see* Loans)

- Time money
 as index to credit conditions, 469
 rates, as affecting call money market, 469
 relation of call money rate to, 674
- Tipping services, 435
- Tips, 21
- Tipster sheets, 441
- "*To deliver*," 99
- "*To prove*," 107
- Toronto Saturday Night*, 445
- Trade information (*see* Sources of information; Market reporting)
- Trader
 danger in setting definite profit goal, 555
 definition of, 33
 discretionary, 285
 floor, 34
 importance of pool manipulations to, 579
 long-swing, 666
 method of buying and selling, 515
 policy of, 558
 room trader, 42
 short-swing, 658, 669, 705
 short-term, 693
 stock market, 512
 successful, 524, 552, 557
 vacation of, 554
 vs. investor, 512, 658
- Trader's vacation, 554
- Trading, 482-557
 analysis (*see* Analysis of stock; Market analysis)
 arbitrage operations, 532
 "*at three days*," 87
 averaging, dangers of, 503
 averaging down, 500
 averaging operations, 502
 averaging up, 501
 banking operations as factor in, 582
 bidding, 64
 buyer's options, 87
 buying and selling, 492, 528
 by big traders, 515
 double stop, 496
 in normal trading, 561
 place of insiders in, 521
 stop and limit orders, 494
 switching stop, 496
 use of coupled order in, 494
 by mail, 254
 cash trade, 87
 chart, principles of, 622-657 (*see also* Charts)
 Clearing House (*see* Clearing House)
 completing the trade, 65
 coupled, graphic illustration, 543
 crossing the crowd, 517
 dangers in, 556, 557
 definition of, 27
 discounting the future, 514
 dividend yield as a factor in, 411
 facilities, through brokerage houses, 38-58
 following the crowd, 516, 517
 for the beginner, 548
 from another broker's office, 254
 general principles of, 524
 give-up order, 255
 hours of, 35
 idea an ancient one, 6, 10, 11
 importance of insiders, 522
 importance of technical considerations in, 559
 individual transaction, 266
 intermediate currents in, 527
 late-day movement, 527
 limit of profit, 540
 long-pull, 420, 668
 long-pull buying, 164
 long-swing, 668, 671
 losses (*see* Losses)
 marginal (*see* Marginal trading)
 methods, 541, 664
 necessity for study in, 544
 objections to, 508
 odd-lot (*see* Odd-lot trading)
 on margin (*see* Marginal trading)
 on support point, 641
 option, 504-510
 call, 506
 dishonesty in, 509
 guaranteed, 509
 put, 504, 505
 spread, 504, 507
 straddle, 504, 506
 use of, 508, 510
 over-the-counter, 453
 paper, 545, 546
 calculating ability from, 547
 pools (*see* Pools; Pool operation)
 price factor in, 46
 principles of, 511-535
 profit and loss limits, 544
 psychological aspects of, 549
 psychological effect on individual, 552

- pyramiding (*see* Pyramiding)
- ready market as a factor, 420
- "regular way," 86
- rules (*see* Rules)
- secondary reaction, 588
 - reason for, 589
- seller's options, 87
- selling order, 69
- selling short (*see* Short selling)
- selling when the good news is out, 515
- short sale, 162
- short selling (*see* Short selling)
- short-swing, 660
- short-term, 420
- short-turn
 - use of chart gap in, 651
 - use of coupled order in, 494
- special settlement trades, 87
- speed in, 39, 40
- statistical study of five methods of, 664
- stock campaign, 498
- stock market and investment, 511
- stop-loss orders as protection in, 539
- stop orders to buy, 484
- successful
 - most important element in, 560
- supply and demand in, 63
- support level, 588
- technical factors in
 - artificial, 560
 - natural, 560-568
 - technical vs. fundamental, 513
- tides of, 528
- typical transaction, 59
- unit of, 50, 187
 - bonds, 450
 - ten-share units, 212
- use of charts in (*see* Charts)
- volume of (*see* Volume of trading)
- week-end profit-taking, 525
- Trading gap (*see* Gap)
- Trading, odd-lot (*see* Odd-lot trading)
- Trading posts, 28-30
- Trans-lux*, 43
- Transaction, 162, 163, 168
 - covering, 174
 - following a typical, 59-78
- Transfer agent, 332
- Transfer form, 333
- Transference of loans, 237
- Trend
 - of corporation earnings, 672
 - secular, 662
- (*see also* Business indexes; Market indexes; Market movements; Technical trend)
- "Trend line," 625, 635, 649
 - example of, 682
- Triangle, 604
 - as indicating pool operations, 604, 606
 - example of, 622, 624, 625, 627
 - three major types of, 628
 - (*see also* Charts)
- Triangular bottom, 602
 - example of, 606, 637
- Triangular top, 602, 682
 - example of, 608
- Trust certificate, 338
- Trust companies
 - as registrar of stocks, 332
 - as supervisors of voting trust agreements, 339
 - as transfer agent, 332
- Trusts (*see* Investment trusts)
- Turning point, 565
- "Two-dollar broker," 34
- Undigested securities, 216
- Unit investment trust, 671
- United Corporation*, 365
- United States Distributing Corporation*, 328
- United States Investor*, 445
- United States Leather Company*, 316
- United States Steel Corporation*, 335, 336, 380
 - common stock, study by Sloan, 665
 - dividend rights, 365
- Unit of trading (*see* Trading)
- Units of preferred and common stock, 320
- Unofficial information, 429
- Unsecured bonds, 305
- Unsecured day loans, 83
- Upward move of cycle, 661
- Upward swing in market, 660
- Value of stock (*see* Stock)
- Van Strum Financial Service*, 438
- Vaupell, George F.*, 33
- Virginia-Carolina Chemical*
 - chart on common stock, 626, 627
- Visiting the exchange, 31
- Volume
 - importance of, in chart system, 645
 - Volume of sales (*see* Stocks)

Volume of trading, 39, 211
New York Curb Exchange, 296
New York Stock Exchange, 215

Voting privileges, 341
 importance of, 342
 non-voting stock, 341
 preferred stocks, 341
 registered voters, 345
 right to vote, 345

Voting proxy, 342, 344

Voting trust agreement
Ford Motor Car Company of Canada, Ltd., 339

Voting trust certificates (*see* Trust certificate)

Wall Street formula, 536

Wall Street Journal, 431, 445
 market index, 457

Wall Street News, 431

"*War Brides*," 296

Warrant bonds (*see* Bonds)

Warrants
 preferred stock with, 328

Wash sale, 577, 578

"*Weak hands*," stock in, 473

Week-end profit-taking, 525

Week-end trading (*see* Trading)

Western Union Telegraph Company, 74, 419

Westinghouse Electric and Manufacturing Co.
 chart of common stock, 602, 603

Wetsel, A. W.
 on the broadening formation, 618

Wetsel Market Bureau, 438

Whitney Market Service, 438

Window dressing, 524, 527

Wire houses, 41

"*With warrants*," 325, 449

"*Without warrants*," 325, 449

Woolworth, F. W., Co., 534

Working capital
 method of calculating, 386
 (*see also* Liquid position)

Worlds Work, 445

Worthington Pump, chart of
 common stock, 608, 609

"*W. W.*," 449

Yield
 high dividend yield as defect, example of, 419
 high yield as danger signal in purchase of stock, 417
 insecurity of dividend as factor in high yield, 418
 method of determining, example, 412
 on bonds, 412
 on stock, 412
 calculation of, 413
 significance of rising yield in declining market, 417
 tables, 413
 (*see also* Appendix F, 812)

